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SUPPLEMENTAL SUBSURFACE INVESTIGATION

11630-11700 Burke Street
Santa Fe Springs, CA 90670

Prepared for:

LARRY PATSOURAS
11700 Burke Street
Santa Fe Springs, CA 90670

Project No. 1576

March 3, 1997

ENVIRONMENTAL AUDIT, INC. ®

Planning, Environmental Analyses and Hazardous Substances Management and Remediation

1000-A ORTEGA WAY
PLACENTIA, CA 92670-7125
714/632-8521

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1.0 INTRODUCTION

This report presents the results of a supplemental subsurface investigation conducted at the property identified as 11630-11700 Burke Street, Santa Fe Springs, California (Site) (see Figure 1). Environmental Audit, Inc. (EAI) was retained by Mr. Larry Patsouras, the current property owner, to complete a supplemental subsurface investigation to provide additional information on chemicals present in soil and ground water beneath the Site. Site investigation activities are being overseen by the County of Los Angeles Fire Department, Health Hazardous Materials Division (County Fire).

On January 25, 1996, County Fire issued a letter to Mr. Patsouras requesting that additional assessment activities and information on Site history be provided for the property. County Fire's request was based on their review of the EAI report entitled "Subsurface Investigation Report, 11630-11700 Burke Street, Santa Fe Springs, California 90670," dated December 18, 1995 (see EAI, 1995).

On February 21, 1996, a meeting was held at the Site between representatives of County Fire and Mr. Patsouras. The purpose of the meeting was to discuss the scope of the supplemental subsurface investigation and establish the locations for additional sampling. Based on the results of the meeting, EAI prepared a Work Plan for the Supplemental Subsurface Investigation (Work Plan), dated February 29, 1996 (see EAI, 1996), and an addendum to the Work Plan dated March 29, 1996. County Fire approved the Work Plan and addendum on April 2, 1996 (see Appendix A). Additionally, the direction of ground water flow was in part determined by the use of an off-site ground water monitoring well located on the adjacent Phibro-Tech property. Use of the subject well for Site related environmental actions was approved in County Fire correspondence dated October 22, 1996 (see Appendix A).

1.1 SCOPE

The scope of the investigation consisted of the following:

- Collecting five near surface soil samples for metals, hydrocarbons and/or polychlorinated biphenyls (PCBs) testing.
- Constructing one 55-foot deep ground water monitoring well (well MW-2).
- Obtaining depth to ground water measurements for the two wells located on the Site (wells MW-1 and MW-2) and a well located on the adjacent Phibro-Tech property (Phibro-Tech well MW-03).
- Establishing elevations for the two Site wells based on the established elevation for Phibro-Tech well MW-03.
- Collecting and testing ground water samples from the two Site wells.
- Preparation of a report presenting the findings of the investigation.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS

In June 1994, AIG Consultants, Inc. (AIG) conducted a Phase I Environmental Site Assessment of the Site. The Site at that time was owned by Mr. William Palley. The Site is divided into two parcels, i.e., a west parcel and an east parcel. The west parcel was occupied by Talco Plastics, Inc. (Talco) and the east parcel contained a warehouse that was vacant (see Figure 2). The purpose of the assessment was to identify any known or potential environmental problems at the Site. Based upon their investigation, AIG concluded that there was evidence of past activity at the Site which may represent environmental risks and/or liabilities. AIG recommended that additional investigation be performed to further evaluate the potential for impact to the environment (see AIG, 1994).

In August 1994, Professional Service Industries, Inc. (PSII) drilled and sampled eight borings (B-1 through B-8) and hand augered four borings (HA-1 through HA-4) at the Site (see Figure 2). The borings ranged in depth between 4.5 and 35 feet below ground surface (bgs). Total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs) and metals were detected in soil samples collected and tested from the Site by PSII (see PSII, 1994).

In November 1994, EAI was retained on behalf of Mr. Patsouras to conduct a subsurface investigation of the Site. At that time, Mr. Patsouras was interested in purchasing the Site. The purpose of the subsurface investigation was to attempt to define the extent of soil contamination encountered at the Site by PSII, and to determine whether ground water had been impacted. Based on the information contained in the AIG and PSII reports and EAI's walk-through inspection of the Site, the following areas of the Site were targeted by EAI for subsurface investigation (see Figure 2):

WEST PARCEL -	Underground Storage Tanks (USTs)
	Clarifiers (Historical Paint/Steam Cleaning Area)
	Mechanical Pit
	Maintenance Shop
EAST PARCEL -	Storage Shed
	Abandoned Clarifiers (filled with concrete)
	Historical Stained Area

Between November and December 1994, EAI advanced 17 borings on the Site. The results of this work coupled with the analytical data available from the PSII work indicated that impacted soil (i.e., soil containing hydrocarbons at concentrations which regulatory agencies typically require remediation) was limited to the storage shed and abandoned clarifiers associated with the East Parcel (see Figure 2 and EAI, 1995). Further, these data indicated that assessment of ground water quality was required pursuant to regulatory guidelines since contaminants were detected within 15 feet of the suspected depth to ground water.

In October 1995, EAI installed one ground water monitoring well (well MW-1) on the Site (see Figure 2). Since hydrocarbons were detected in the ground water sample collected from well M-1, EAI recommended additional ground water assessment activities (see EAI, 1995).

3.0 SUPPLEMENTAL INFORMATION ON SITE HISTORY/USE

The Site includes approximately 8.5 acres containing several buildings located in a mixed urban area neighborhood, i.e., residential, commercial and industrial land uses. In the early to mid 1970's, the Site was reportedly divided into an east and west parcel. Currently, the east parcel contains a single building occupied by the present property owner. This building is used to warehouse and distribute food products. The west parcel is presently occupied by Talco.

The building on the east parcel was previously occupied by Max Rouse & Sons, Inc., industrial auctioneers, beginning in 1981 and by Master Box and Paper Company beginning in 1987. Talco has leased the west parcel since 1983. Palley Supply Company (Palley), a government surplus order house, occupied the Site beginning in 1973. Globe International, Inc. (Globe), a manufacturer of oil well drilling equipment and tools, occupied the Site beginning in 1958.

In 1970, Globe received a Notice of Violation (NOV) from the Los Angeles County Engineer for discharging of liquid waste to the ground surface. An analysis of the waste discharged indicated high levels of dissolved solids. The waste was the result of steam cleaning and degreasing operations of steel parts prior to painting. Oil and grease in the wastewater were not analyzed at that time. Subsequently, Globe installed a waste disposal system in which liquid waste flowed out into the sewer after passing through two three-compartment interceptors/clarifiers. Solid sedimentary waste products consisting of chemicals, grease, sand and steel scales estimated at 15-20 cubic feet per month was reportedly pumped from the interceptors/clarifiers and disposed of by private vendors.

In 1978, Palley received a NOV from the City of Santa Fe Springs for discharge of industrial wastewater to the public sewer system. Palley, who was engaged in hydraulic equipment maintenance, was discharging industrial waste from a steam cleaning operation through one or both of the interceptors/clarifiers described above, to the sanitary sewer.

In 1987, the County of Los Angeles Department of Health Services requested a criminal complaint to be filed by the District Attorney's office against Palley. The complaint was associated with the presence of the two subsurface structures (interceptors/clarifiers) consisting of three compartments and each compartment containing a black oily liquid resembling waste oil. Palley ceased operations in 1987.

In 1988, following overflow of the abandoned clarifiers onto the east parcel of the Site during a rain storm, the City of Santa Fe Springs Fire Department directed Mr. Palley, the then property owner, to properly dispose of the hazardous waste contained in the two clarifiers and the approximately twenty 55-gallon drums also containing hazardous waste located directly adjacent to the clarifiers. Records indicated that 3,500 gallons of hazardous waste liquid were removed from the Site on November 15, 1988. The clarifiers were reportedly subsequently abandoned by filling the clarifiers with concrete. EAI was unable to locate any permits issued for installation or abandonment of the clarifiers.

Talco, the current tenant occupying the west parcel of the Site, is a reprocessor of plastic resin. Plastic scrap is purchased from producers of various manufactured plastic products.

The scrap plastic is ground and extruded into pellets for reuse by the same industry. Talco presently uses and/stores a variety of hazardous or regulated materials on Site. These include gasoline, diesel fuel, liquid propane gas, acetylene, oxygen, waste oil, lubricating oil, and detergents. Current material safety data sheets are maintained on Site (see AIG, 1994).

3.1 LEGAL DESCRIPTION

The Site is defined by the County of Los Angeles, Office of Assessor, as Assessor's I.D. No. Map Book 8168, Page 1, Parcel 8. The legal description of the Site is as follows: "Colima tract in the Rancho Santa Gentrudes lot com at intersection of SE line of Burke St. w/NE line of SPRR R/W th SW on sd SE line 805.71' th S7°33'30"W 509.79' th SE and following bdry line of sd R/W to beg part of ASC De Polloreno 371 AC Allot."

4.0 NEAR AND ADJACENT PROPERTIES

Information in regulatory agency files indicate that soil and ground water contamination investigations have been conducted at properties adjacent to and near the Site. Reports indicate that ground water monitoring wells have been installed at (see Figure 2):

- Pilot Chemical Company, 11756 Burke Street, Santa Fe Springs. This site is located east and immediately adjacent to the Site. Ten monitoring wells and one extraction well are reportedly present at this site The depth to ground water beneath this site in November 1994 ranged from 38 to 42 feet bgs with a southwest ground water flow direction.

- Phibro-Tech, Inc. (formerly Southern California Chemical Company), 8851 Dice Road, Santa Fe Springs. This site is located south and immediately adjacent to the Site. Twenty-four wells are reportedly located on this site. Thirteen monitoring wells and one extraction well are currently in use.

- Techni-Braze, Inc., 11845 Burke Street, Santa Fe Springs. This site is located northeast of the Site. Four monitoring wells are reportedly present at this site.

It has been reported that contaminants in the ground water at the above sites have included metals, e.g., cadmium and chromium, and organic compounds including 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethylene (1,1-DCE), 1,2-dichloroethane (1,2-DCA), benzene, carbon tetrachloride, chloroform, ethylbenzene, trichloroethylene (TCE), tetrachloroethylene (PCE), toluene, xylenes and methylene chloride.

5.0 FIELD WORK

5.1 DRILLING AND SOIL SAMPLING

On December 23, 1996, one ground water well (well MW-2) was constructed on the Site (see Figure 2). Appendix B contains a copy of the Los Angeles County Department of Health Services permit issued for construction of the well.

The well was drilled by Cascade Drilling, Inc. of Norwalk, California (License No. 717510; C-57 Water Well Drilling), under the supervision of an EAI California registered geologist. The well was drilled using 8-inch outside diameter continuous flight hollow stem augers to a depth of approximately 55 feet bgs. The well was logged in accordance with the Unified Soil Classification System (see Appendix C).

Soil samples were collected at five feet bgs and at approximately five-foot intervals thereafter until termination. Soil samples were collected using a 2-inch diameter by 18-inch long split-spoon drive sampler employed in advance of the augers. Samples were retrieved and examined for lithology identification purposes only, i.e., soil samples from the well were not retained for analytical testing.

Soil samples were obtained from five additional locations (SS-1, S-2, S-3, SS-4 and SS-5) on the Site (see Figure 2). These soil samples were obtained from depths ranging from three inches to two feet bgs (see Section 7.1). The soil samples were obtained at each location, using a hand trowel, and placed in a screwed top 8-ounce glass jar and capped with a Teflon lined lid. The samples were labeled with the sample point identification, depth interval, time and date, and EAI project number. Each sample was individually sealed in a "Ziploc" plastic bag, and immediately placed into an ice chest chilled using frozen blue ice. The samples were kept chilled until delivered to the laboratory for analytical testing. All samples were logged on a chain-of-custody record form (see Appendix D).

NOTE: Were for metal Analysis SO Glass OK

5.2 MONITORING WELL CONSTRUCTION

Well MW-2 was constructed of two-inch inside diameter flush threaded Schedule 40 polyvinyl chloride well casing. All well casing materials were steam cleaned prior to installation. The well was designed with a slotted section (0.02-inch x 1.5-inch slots) which extends approximately 20 feet below the water table and 5 feet above. The annular space between the borehole wall and well casing was backfilled with grade #3 Monterey sand to approximately two feet above the slotted section. A surge block was used to settle the filter pack prior to placement of the bentonite seal. An approximately three foot layer of hydrated bentonite chips was placed on top of the sand pack followed by a cement/bentonite slurry to within three feet of the surface. The remaining annual space was grouted to the surface using cement. A flush mounted traffic grate was placed on the well and was set to prevent sheet flow from entering the well head. Appendix E contains the specific well construction details.

5.3 WELL ELEVATIONS

On January 13, 1997, EAI staff (under the supervision of an EAI California registered civil engineer) established elevations for Site wells MW-1 and MW-2 based on the established elevation for Phibro-Tech well MW-03 (151.71 feet above mean sea level [MSL]) (see Table 1).

5.4 GROUND WATER SAMPLING

On January 13, 1997, prior to purging activities, depth measurements to fluid levels were recorded for the two Site wells and Phibro-Tech well MW-03 using an interface probe accurate to 0.01 foot (see Table 1). Prior to sampling the two Site wells, the wells were purged using a Grundfos MP1 submersible pump. Temperature, conductivity, pH and turbidity readings were recorded during purging (see Appendix F).

Ground water samples were obtained from just below the water surface using disposable Voss Technologies' bottom bailers equipped with VOC sampling tips. Use of these bailers precludes the potential for cross-contamination. The samples from each well were sealed in two 40-milliliter (ml) volatile organic analysis (VOA) vials and two plastic bottles which contained the appropriate sample preservatives as prepared by the laboratory. Each vial was completely filled so that no head space existed between the sample and the lids. The samples were labeled, handled and transported as described in Section 5.1.

5.5 EQUIPMENT CLEANING PROTOCOL

The augers were steam cleaned before drilling the well. The hand trowel used to obtain the soil samples was decontaminated between each sampling using the following procedure:

- All excess soil was scraped off the trowel.
- The trowel was washed in a solution of Alconox detergent and tap water.
- The trowel was rinsed with tap water.

The submersible pump and hose system (Equipment) only used to purge the wells prior to sampling, was decontaminated using the following procedure:

- The Equipment was flushed using a solution of Alconox detergent and tap water.
- The Equipment was flushed with tap water.

5.6 EFFLUENT MANAGEMENT

All effluent generated during sampling and equipment decontamination activities was sealed in labeled 55-gallon drums. The drums remained on the Site pending the results of the analytical testing, at which time the appropriate disposal method was determined. Manifests will be maintained by the property owner documenting disposal of the waste.

6.0 SUBSURFACE CONDITIONS

The subsurface conditions encountered in the soil borings are presented in Appendix C. The following is a generalized summary of the soil stratigraphy encountered.

At each boring location, the soil was covered with asphalt to a depth of approximately three inches bgs (except soil sample SS-5 which was located in a grassy area). Beneath the pavement, a rusty, dry to slightly moist, slightly sandy silt was encountered to a depth of approximately seven feet bgs. Beneath the silt, a very silty sand was encountered to approximately 12 feet bgs which graded into a tan, medium to fine grained sand to a depth of approximately 29 feet bgs. A tan to rust, clayey silt was then encountered to a depth of approximately 33 feet bgs followed by a silty sand grading into a sand at a depth of 43 feet bgs. A slightly sandy clayey silt was then encounter to the maximum depth investigated of 55 feet bgs.

Ground water was encountered during the drilling operation at a depth of approximately 35 feet bgs.

GW @ ~35' bgs

7.0 ANALYTICAL TESTING

All analytical testing was completed by Calscience Environmental Laboratories (CEL), a state of California certified hazardous waste testing laboratory. CEL is certified for all tests completed as part of this investigation.

7.1 SOIL SAMPLES

As requested by County Fire, the soil samples collected from the five near surface borings were selectively tested for total recoverable petroleum hydrocarbons (TRPHs) by EPA Method 418.1, semi-volatile organic compounds (SVOCs) by EPA Method 8270, PCBs by EPA 8080, arsenic by EPA Method 6010, and Title 22 metals by EPA Methods 6010 and 7471. The samples were tested as follows:

Sample No.	Depth bgs	Analytical Test(s)
SS-1	3 inches	Arsenic
S-2	3 inches	Title 22 Metals
S-3	3 inches	Arsenic
SS-4	2 feet	TRPH, SVOCs, PCBs
SS-5	1-2 feet	Arsenic (background)

The results of the testing are shown in Table 2. The laboratory reports are contained in Appendix D.

7.2 GROUND WATER SAMPLES

The ground water samples were tested for VOCs by EPA Method 524.2, and Title 22 metals by EPA Methods 200.7 and 245.1. Note, the metals testing was conducted on both filtered and unfiltered samples. Filtering was completed by CEL. The results of the testing are shown in Table 3. The laboratory reports are contained in Appendix D.

8.0 DISCUSSION

8.1 SOIL SAMPLES ANALYZED FOR ARSENIC

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Soil samples SS-1, S-3 and SS-5 (background) were analytically tested for arsenic. No arsenic was detected in these samples (see Table 2).

8.2 SOIL SAMPLE ANALYZED FOR TITLE 22 METALS

Soil sample S-2 was analytically tested for Title 22 metals. Several metals were detected in this sample at concentrations ranging between approximately 2 parts per million (ppm) and 77 ppm (see Table 2).

Title 22, California Code of Regulations contains standards for total and soluble concentrations of metals which, if exceeded, renders a waste hazardous. One standard is the Total Threshold Limit Concentration (TTLC). This standard is used when considering the total amount of a specific metal, e.g., arsenic in a given sample. No metals were detected in sample S-2 at concentrations equal to or greater than their TTLC standards.

The other Title 22 standard is the Soluble Threshold Limit Concentration (STLC). This standard is used when considering the amount of a specific metal that is extractable/soluble in an acid solution as determined by the Waste Extraction Test (WET) method. Normally, the WET is only conducted if the total sample concentration (i.e., the TTLC concentration) is equal to or greater than ten times the STLC standard. No total metals were detected at concentrations equal to or greater than ten times their STLC standards.

8.3 SOIL SAMPLE ANALYZED FOR TRPH, SVOCs AND PCBs

Soil sample SS-4 was analytically tested for TRPH, SVOCs and PCBs. No SVOCs or PCBs were detected (see Table 2).

TRPH was detected at a concentration of 7,530 ppm (see Table 2). Based on this results, soil sample SS-4 also was analytically tested by EPA Method 8015M for carbon chain identification. Results indicate the no petroleum hydrocarbons were detected in the C_7 to C_{14} carbon ranges and that the lightest concentration started in the C_{15} range (see Appendix D). These data indicated that the hydrocarbons present are heavy ends.

8.4 GROUND WATER SAMPLES ANALYZED FOR VOCs

Several VOCs were detected in the ground water samples collected from wells MW-1 and MW-2, e.g., 1,1-DCE, 1,1-DCA, chloroform, TCE, PCE, toluene and xylenes. The following VOCs were detected at concentrations equal to or greater than their respective action levels for drinking water: 1,1-DCE, carbon tetrachloride, 1,2-DCA, TCE and PCE (see Table 3).

Table 4 presents the historical results of ground water sampling of well MW-03 located on the adjacent Phibro-Tech property.

8.5 GROUND WATER SAMPLES ANALYZED FOR TITLE 22 METALS

8.5.1 Filtered Samples

No metals were detected in the filtered ground water samples collected from wells MW-1 and MW-2 (see Table 3).

8.5.2 Unfiltered Samples

Several metals were detected in the unfiltered ground water samples collected from wells MW-1 and MW-2. However, only chromium was detected at a concentration greater than its established action level for drinking water (see Table 3).

9.0 CONCLUSIONS AND RECOMMENDATIONS

9.1 SOIL CONTAMINATION

The results of this and previous field investigations indicate that soil contamination (unsaturated zone) is confined to localized areas at the storage shed and northern most abandoned clarifier located on the East Parcel of the Site (see Figure 2). EAI recommends that a plan be prepared to remediate the impacted soils at the storage shed and northern most abandoned clarifier. The remedial action plan (RAP) should provide proposed cleanup levels (including justification for the cleanup levels), evaluate possible remedial options, and select a proposed remedial option. The Plan should be submitted to County Fire for their review and approval, prior to implementation.

9.2 GROUND WATER

The depth to water beneath the Site is approximately 35 feet bgs and was determined to have a west-southwesterly flow direction. Metals, e.g., cadmium and chromium, and several chlorinated hydrocarbons, e.g., 1,1-DCA, 1,1-DCE, 1,2-DCA, carbon tetrachloride, TCE, PCE and methylene chloride are known to be present in ground water beneath several adjacent properties. The results contained and/or referenced herein indicate that ground water is impacted (contaminated) on a regional basis. However, the on-site soil contamination identified by the storage shed and northern most abandoned clarifier located on the East Parcel of the Site represents a potential source for additional impact to ground water.

Flow = W-SW direction

10.0 LIMITATION

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities. This report has been prepared for Mr. Larry Patsouras. The conclusions and recommendations included in this report are based on information contained or referenced herein, and our best judgment. No other warranty, expressed or implied, is made as to the professional advice contained in this report.

Respectfully submitted,

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President

11.0 REFERENCES CITED

AIG Consultant, Inc., "Phase I Environmental Site Assessment, Industrial Buildings, 11630-11700 Burke Street, Santa Fe Springs, California 90670," dated June 30, 1994 (AIG, 1994).

Professional Service Industries, Inc., "Phase II Preliminary Contamination Assessment, 11630-11700 Burke Street, Santa Fe Springs, California," dated August 18, 1994 (PSII, 1994).

Environmental Audit, Inc., "Subsurface Investigation Report, 11630-11700 Burke Street, Santa Fe Springs, CA 90670," dated December 18, 1995 (EAI, 1995).

Environmental Audit, Inc., "Work Plan for Supplemental Subsurface Investigation, 11630-11700 Burke Street, Santa Fe Springs, CA 90670," dated February 29, 1996 (EAI, 1996).

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TABLES

SUPPLEMENTAL SUBSURFACE INVESTIGATION
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TABLE 1

GROUND WATER ELEVATIONS

DATE	ELEVATION OF TOP SURFACE OF PVC WELL CASING (FEET MSL)	MEASURED DEPTH TO GROUND WATER (FEET bgs)	MEASURED DEPTH TO PRODUCT	PRODUCT THICKNESS	GROUND WATER ELEVATION (FEET MSL)
MW-1	152.83				
10-05-95		35.83(1)	-	0	117.00
01-13-97		38.33(1)	-	0	114.50
MW-2	149.66				
01-13-97		32.14(1)	-	0	117.52
MW-03	151.71				
01-13-97		37.52(2)	-	0	114.19

NOTES:

(1) Depth to water is as measured from the top of PVC well casing.
(2) Depth to water is as measured from the top of traffic cover (Phibro-Tech).
MSL Mean sea level
bgs Below ground surface

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SUPPLEMENTAL SUBSURFACE INVESTIGATION
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TABLE 2

ANALYTICAL TESTING RESULTS FOR SOIL SAMPLES COLLECTED ON DECEMBER 23, 1996

Parts per Million (ppm)

SAMPLES I.D. #		TRPH	SVOCs	PCBs	Arsenic	Title 22 Metals
	Depth					
SS-1	3'-4"	NA	NA	NA	ND	NA
S-2	3'-4"	NA	NA	NA	NA	(1)
S-3	3'-4"	NA	NA	NA	ND	NA
SS-4	24"	7,530	ND	ND	NA	NA
SS-5	15"-18"	NA	NA	NA	ND	NA

NOTES:

NA Not analyzed.

ND Not detected above laboratory reportable limit.

(1) No metals were detected above Title 22 Total Threshold Limit Concentration (TTLC) and/or 10 x Soluble Threshold Limit Concentration (STLC) Values.

Metals detected (ppm):

Barium	77.3
Cadmium	1.9
Chromium	12.8
Cobalt	4.7
Copper	13.5
Nickel	6.0
Vanadium	24.7
Zinc	27.0

No other metals were detected above the laboratory reportable limit.

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SUPPLEMENTAL SUBSURFACE INVESTIGATION
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TABLE 3

ANALYTICAL TESTING RESULTS FOR GROUND WATER SAMPLES COLLECTED ON JANUARY 13, 1997

Parts per Billion

ANALYTE	MW-1	MW-2	ACTION LEVEL (a)
METALS (b)		- appears to be upgradient	
Filtered Sample:	ND	ND	-
Unfiltered Sample:			
Barium	520	440	1000
Chromium	80	90	50
Cobalt	<30	40	NS
Copper	70	80	1000*
Nickel	<40	50	NS
Vanadium	130	140	NS
Zinc	150	190	5000*
HYDROCARBONS (c)			
1,1-Dichloroethene	4.3	33.2	6
1,1-Dichloroethane	<0.5	1.3	5
Chloroform	4.5	1.5	100
1,1,1-Trichloroethane	1.3	7.9	200
Carbon Tetrachloride	1.1	<0.5	0.5
1,2-Dichloroethane	0.5	<0.5	0.5
Trichloroethene	11.4	14.5	5
Toluene	1.9	<0.5	100
Tetrachloroethene	93	296	5
Total Xylenes	2.7	<1.0	1750

NOTES:

ND Not detected above the laboratory reportable limit.

(a) California primary or secondary maximum contaminant level (MCL) for drinking water. Primary MCL listed unless otherwise indicated.

(b) Sample was tested for Title 22 metals by EPA Methods 200.7 and 245.1. Only the metals detected are listed on this table. See Appendix D for laboratory reports.

(c) Sample was tested for hydrocarbons by EPA Method 524.2. Only the hydrocarbons detected are listed on this table. See Appendix D for laboratory reports.

* Secondary MCL.

33.2 = concentration equal to or above action level.

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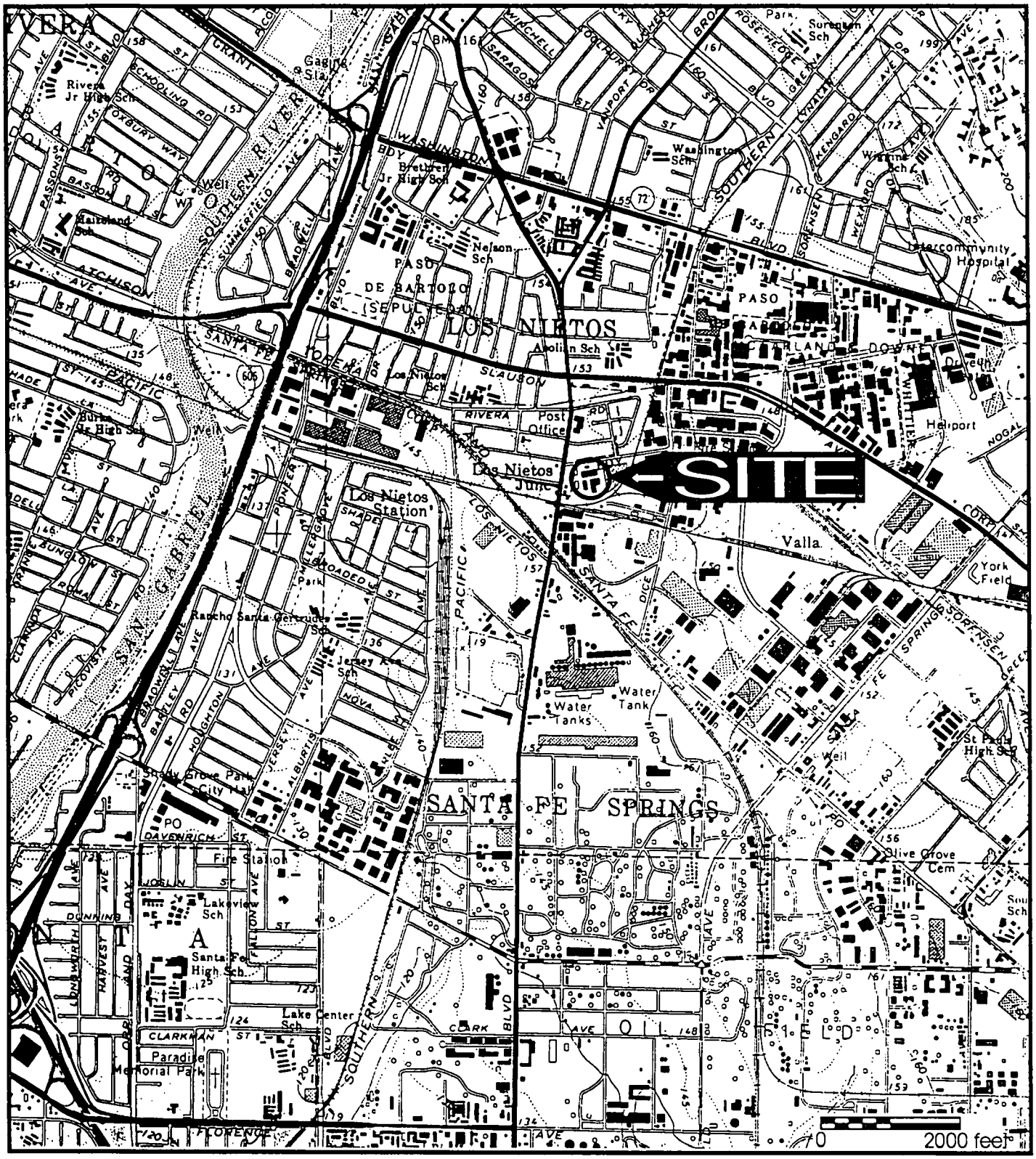
TABLE 4
HISTORICAL RESULTS MW-03
PHIBRO-TECH, INC.

Monitor Well No./Date	Groundwater Elevation (Feet MSL)	METALS				PURGEABLE AROMATICS				HALOCARBONS
		Hexavalent Chromium (mg/L)	Total Chromium (mg/L)	Cadmium (mg/L)	Copper (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-Benzene (ug/L)	Total Xylenes (ug/L)	Trichloroethene (ug/L)
MW-03										
Jan-89	95.02	<0.01	<0.014	<0.003	<0.009	7.4	17	4,900	1,500	74
Apr-89	99.29	<0.05	0.07	<0.01	<0.02	<50	<50	1,200	60	110
Jul-89	98.21	<0.05	0.08	<0.01	<0.02	<7	<10	10	<10	120
Oct-89	94.75	<0.05	<0.02	<0.01	<0.05	<50	<100	1,600	150	<100
Jan-90	95.98	<0.02	<0.01	<0.01	<0.02	<5	<5	110	<10	65
Apr-90	97.72	<0.02	<0.01	<0.005	<0.02	<50	<50	2,100	720	74
Jul-90	99.27	<0.02	<0.01	<0.01	<0.02	<5	<5	<5	<10	130
Oct-90	97.29	<0.02	<0.01	<0.005	<0.02	9	2	<1	<1	130
Jan-91	97.69	<0.02	<0.01	<0.005	<0.02	<0.5	<1	<1	<1	38
Apr-91	99.81	<0.02	<0.01	<0.005	<0.02	<0.5	<1	<1	<1	27
Jul-91	101.63	<0.02	<0.01	<0.005	<0.02	<0.5	<1	<1	<1	28
Oct-91	100.99	<0.02	<0.01	<0.005	0.03	<0.5	<1	<1	<1	71
Jan-92	103.44	<0.05	<0.0081	<0.0027	0.02	<1	<1	<1	4	76
Apr-92	105.04	<0.02	<0.02	<0.005	<0.02	<0.5	<1	<1	<0.5	25
Jul-92	106.61	<0.02	0.02	<0.005	0.13	<0.5	<1	<1	<1	76
Oct-92	103.93	<0.02	<0.02	<0.005	0.038	0.52	<1	<1	<1	130
Jan-93	107.28	<0.02	<0.01	<0.005	0.096	<2.5	<5	<5	<5	84
Apr-93	115.17	<0.02	<0.01	<0.005	<0.02	<0.5	<1	<1	<1	12
Jul-93	115.92	<0.02	<0.01	<0.005	<0.02	<0.5	3.3	2.6	5.9	16
Oct-93	115.67	<0.02	<0.01	<0.005	<0.02	<0.5	<1	2.6	4.8	17
Jan-94	115.69	<0.02	<0.01	<0.005	<0.02	<0.5	<1	<1	<1	10
Apr-94	116.33	<0.02	<0.01	<0.005	<0.02	<0.5	<1	<1	<1	15
Jul-94	116.91	<0.02	<0.01	<0.005	<0.02	<0.5	<1	<1	<1	26
Oct-94	110.85	<0.02	<0.01	<0.005	<0.02	1.2	3.5	1.5	12	76
Jan-95	111.83	<0.02	<0.01	<0.005	<0.02	<0.5	<1	<1	<1	72
Apr-95	117.83	<0.02	0.0023	<0.001	<0.02	<0.5	<1	1.3	<1	57
Jul-95	119.20	<0.02	<0.01	<0.005	<0.02	<0.5	2.0	5.2	8.8	9.5
Oct-95	115.45	<0.02	<0.01	<0.005	<0.02	<0.5	<1	1.7	3.3	30
Jan-96	113.41	<0.02	<0.01	<0.005	<0.02	<0.5	<1	<1	5.1	26
Apr-96	116.73	<0.02	<0.01	<0.005	<0.02	<0.5	<1	2.8	3.6	46
Jul-96	116.33	<0.01	<0.01	<0.005	<0.02	<0.5	1.8	9.0	12	17
Oct-96	112.45	<0.01	<0.01	<0.005	<0.02	<0.5	<1	5.4	6.2	21

Source: Phibro-Tech, Inc. October 1996 Quarterly Monitoring Report
Note: < = Not detected at or above concentration limit listed.

FIGURES



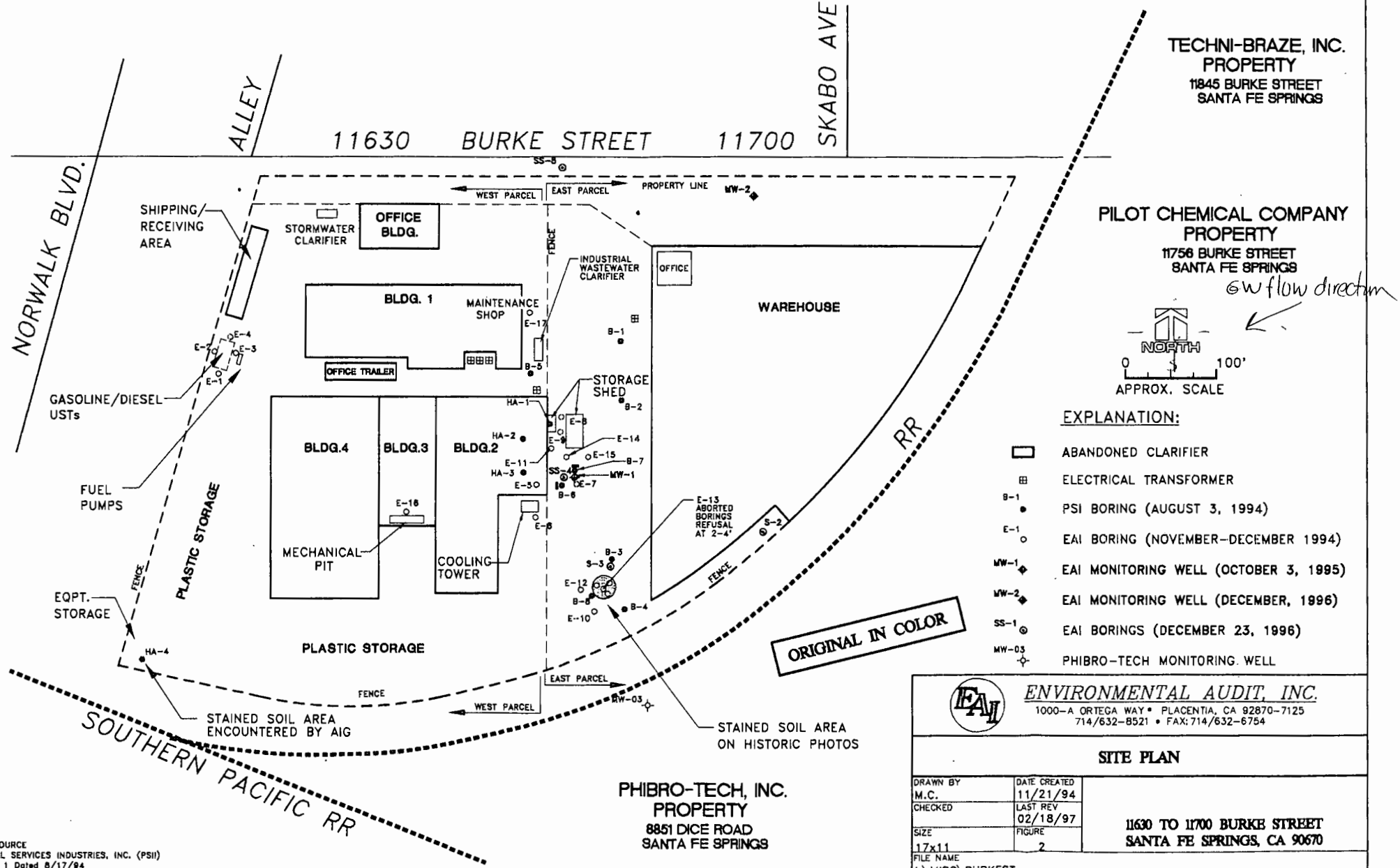
ENVIRONMENTAL AUDIT, INC.

LOCATION MAP
11630-11700 Burke Street
Santa Fe Springs, CA 90670

SOURCE: USGS TOPOGRAPHIC 7.5 MINUTE SERIES
WHITTIER, CALIFORNIA QUADRANGLE

Figure 1

Project No. 1576
K:\1576-LM.CDR



TECHNI-BRAZE, INC.
PROPERTY
11845 BURKE STREET
SANTA FE SPRINGS

PILOT CHEMICAL COMPANY
PROPERTY
11756 BURKE STREET
SANTA FE SPRINGS

gw flow direction

EXPLANATION:

- ABANDONED CLARIFIER
- ELECTRICAL TRANSFORMER
- B-1 PSI BORING (AUGUST 3, 1994)
- E-1 EAI BORING (NOVEMBER–DECEMBER 1994)
- MW-1 EAI MONITORING WELL (OCTOBER 3, 1995)
- MW-2 EAI MONITORING WELL (DECEMBER, 1996)
- SS-1 EAI BORINGS (DECEMBER 23, 1996)
- MW-03 PHIBRO–TECH MONITORING WELL

ORIGINAL IN COLOR

PHIBRO-TECH, INC.
PROPERTY
8851 DICE ROAD
SANTA FE SPRINGS

BASE MAP SOURCE
PROFESSIONAL SERVICES INDUSTRIES, INC. (PSII)
Drawing No. 1 Dated 8/17/94

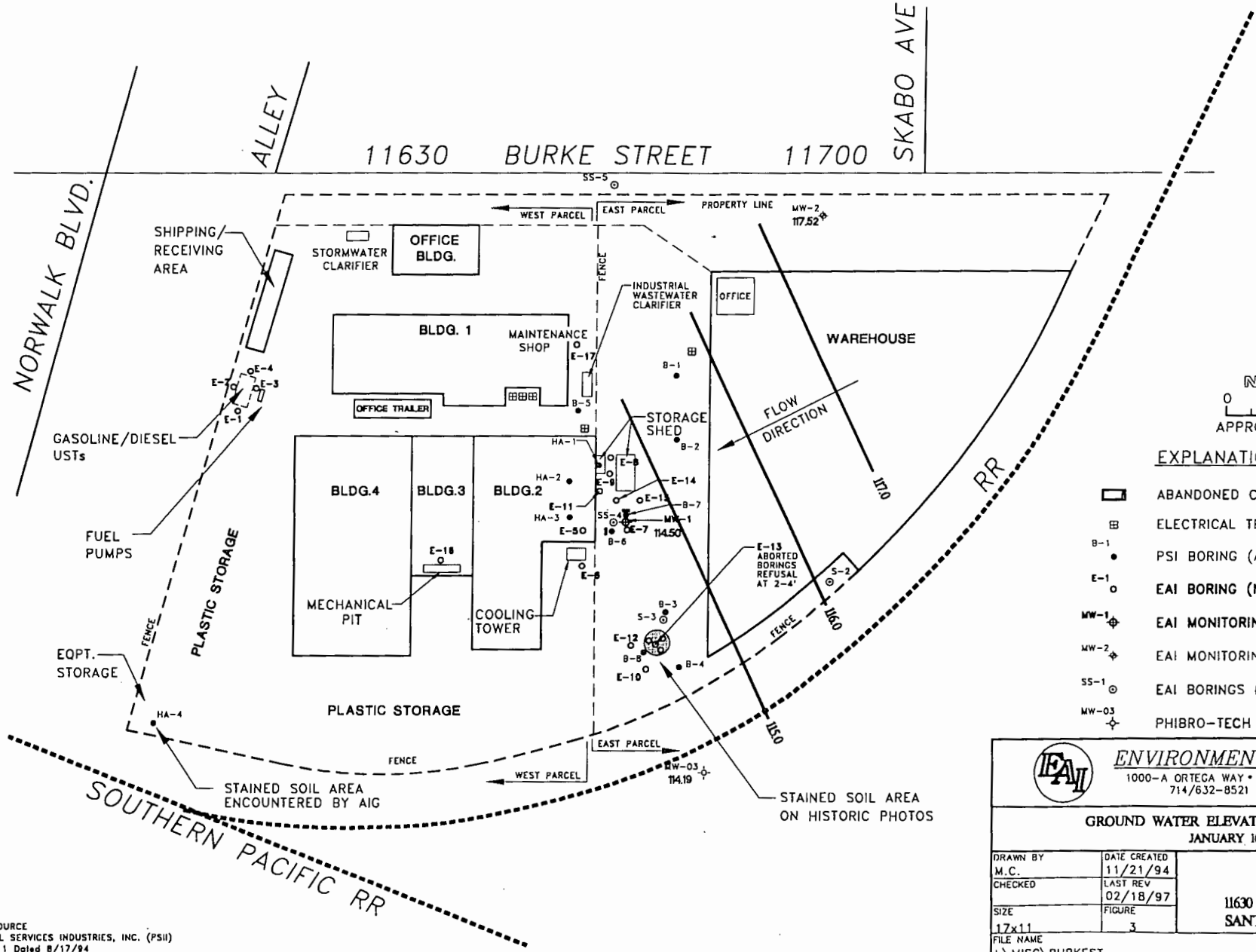
Job No. 1576

ENVIRONMENTAL AUDIT, INC.
1000–A ORTEGA WAY • PLACENTIA, CA 92870–7125
714/632–8521 • FAX: 714/632–6754

SITE PLAN

DRAWN BY M.C.	DATE CREATED 11/21/94	11630 TO 11700 BURKE STREET SANTA FE SPRINGS, CA 90670
CHECKED	LAST REV 02/18/97	
SIZE 17x11	FIGURE 2	
FILE NAME I:\MISC\BURKEST		

where is SS1?



BASE MAP SOURCE
PROFESSIONAL SERVICES INDUSTRIES, INC. (PSII)
Drawing No. 1 Dated 8/17/94

Job No. 1576

ENVIRONMENTAL AUDIT, INC.
1000-A ORTEGA WAY • PLACENTIA, CA 92870-7125
714/632-8521 • FAX: 714/632-6754

GROUND WATER ELEVATION CONTOUR MAP
JANUARY 16, 1997

DRAWN BY: M.C.	DATE CREATED: 11/21/94	
CHECKED:	LAST REV: 02/18/97	11630 TO 11700 BURKE STREET SANTA FE SPRINGS, CA 90670
SIZE: 17x11	FIGURE: 3	
FILE NAME: I:\MISC\BURKEST		

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

P. MICHAEL FREEMAN
FIRE CHIEF
FORESTER & FIRE WARDEN

Refer reply to:
HEALTH HAZARDOUS MATERIALS DIVISION
5825 Rickenbacker Rd
Commerce CA 90040-3027

October 22, 1996

Mr. Larry Patsouras
Krekopia Inc.
11700 Burke Street
Santa Fe Springs, CA 90606

Dear Mr. Patsouras:

SUBJECT: **FORMER PALLEY PROPERTY, 11630-11700 BURKE STREET, SANTA FE SPRINGS, CA 90606**

This Department has completed a review of the letter, dated September 6, 1996, submitted by your attorney, Jack Glaser. As discussed in telephone conversations between Mr. Glaser and Kim Clark of this Department on September 30, 1996, an approval is hereby granted for the sampling of the groundwater monitoring well that is located on the adjacent property, Phibro Tech.

The sampling and analysis procedures must follow those outlined in the workplan previously approved by this Department in the April 2, 1996, letter. You are required to complete the groundwater sampling and the other items included in the previously approved workplan by November 15, 1996 (note: original deadline for implementation was May 31, 1996).

This approval is contingent upon you and your representatives complying with the standards set forth in this Department's "Guidance for Site Mitigation Workplans"; CCR Title 8, Section 5192, "Hazardous Waste Operations and Emergency Response"; and following the workplan as approved. Any deviation or changes must be submitted in writing with this Department's susbsequent approval.

Please notify this Department three (3) working days prior to implementation of the workplan. If you have any questions, please feel free to call Kim Clark at (213) 890-4114.

Very truly yours,

THOMAS W. KLINGER, SUPERVISOR
SITE MITIGATION UNIT
HEALTH HAZARDOUS MATERIALS DIVISION

TK:kc

c: Jack Glaser, Jaffe, Trutanich, Scatena & Blum
Steve Bright, Environmental Audit

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

P. MICHAEL FREEMAN
FIRE CHIEF
FORESTER & FIRE WARDEN

Refer reply to:
HEALTH HAZARDOUS MATERIALS DIVISION
5825 Rickenbacker Rd
Commerce CA 90040-3027

April 2, 1996

Mr. Larry Patsouras
Krekopia Inc.
11700 Burke Street
Santa Fe Springs, CA 90606

Dear Mr. Patsouras:

SUBJECT: **FORMER PALLEY PROPERTY, 11630 - 11700 BURKE ST, SANTA FE SPRINGS, CA 90606**

This Department has completed a review of the "Workplan For Supplemental Subsurface Investigation", dated February 29, 1995, and the addendum, dated March 29, 1996, submitted by your consultant, Environmental Audit, Inc. Based on this review, an approval is hereby granted for implementation of the workplan and the addendum. This approval is contingent upon you and your representatives complying with the standards set forth in this Department's "Guidance for Site Mitigation Workplans"; CCR Title 8, Section 5192, "Hazardous Waste Operations and Emergency Response"; and the following:

1. The workplan and addendum shall be adhered to as approved. Any deviation or change must be submitted in writing and written approval obtained by this Department prior to implementation.

2. All necessary permits and/or approvals for any work associated with this workplan must be obtained from the appropriate agencies. The requirements listed herein do not exempt the responsible party or his agent from compliance with any other applicable laws, regulations, or ordinances. They do not legalize waste treatment or disposal facilities and they leave unaffected any further restriction or restraint which may be contained in other statutes or required by other agencies.

3. This workplan must be implemented by May 31, 1996.

4. Notify this office at least three (3) working days prior to the implementation of this workplan.

5. All samples shall be analyzed by a laboratory which has been certified by the California Environmental Protection Agency, Department of Toxic Substances Control, for the specified EPA test methods and is capable of reaching the practical quantitation limits specified in SW-846 for those methods.

6. Within sixty (60) days after the completion of the work specified in the plan, a report detailing the results in compliance with the requirements referenced in this Department's "Guidance for Site Mitigation Workplans" must be submitted.

If you have any questions, please feel free to call Kim Clark at (213) 890-4114.

Very truly yours,

THOMAS W. KLINGER, SUPERVISOR
SITE MITIGATION UNIT
HEALTH HAZARDOUS MATERIALS DIVISION

TK:kc

c: John Glaser, Jaffe, Trutanich, Scatena & Blum
Steve Bright, Environmental Audit,Inc.

APPENDIX B: MONITORING WELL PERMIT

APPLICATION FOR WELL PERMIT

ENVIRONMENTAL HEALTH 2525 Corporate Place Monterey Park, Ca 91754
COUNTY OF LOS ANGELES DEPARTMENT OF HEALTH SERVICES

DATE 04/15/96

DESCRIPTION

TYPE OF PERMIT (CHECK)

- [X] NEW WELL CONSTRUCTION
- [ ] RECONSTRUCTION OR RENOVATION
- [ ] DESTRUCTION

TYPE OF WELL

- [ ] PRIVATE DOMESTIC
- [ ] PUBLIC DOMESTIC
- [ ] IRRIGATION
- [X] OBSERVATION/MONITORING
- [ ] CATHODIC
- [ ] INDUSTRIAL
- [ ] GRAVEL PACK
- [ ] TEST

TYPE OF CASING
2-inch diameter flush threaded schedule 40 PVC

METHOD OF SEALING OF CASING
Bentonite and concrete sanitary seal (see attached figure)

METHOD OF DESTRUCTION

LOCATION

ADDRESS (NUMBER, STREET, AND NEAREST INTERSECTION)
11700 Burke Street @ Norwalk Boulevard

CITY
Santa Fe Springs

DIAGRAM (SHOW PROPERTY LINES, STREET, ADDRESS, WELL SITE, SEWERS, AND PRIVATE SEWAGE DISPOSAL SYSTEMS ALONG WITH LABELS AND DIMENSIONS)

Two (2) proposed ground water monitoring well locations (MW-2 and MW-3). See attached figure.

RECEIVED
MAY 10 1996
ENVIRONMENTAL AUDIT

Permit issued for: 2(two) Monitoring Wells Construction

APPLICANT

NAME OF WELL DRILLER (PRINT)
Cascade Drilling, Inc.

TRADE NAME
11250 E. Firestone Boulevard

BUSINESS ADDRESS
Norwalk, CA 90650

CITY

NAME OF WELL OWNER (PRINT)
Mr. Larry Patsouras

MAILING ADDRESS
11700 Burke Street

CITY
Santa Fe Springs, CA

I hereby agree to comply in every respect with all regulations of the County Preventive/Public Health Services and with all ordinances and laws of the County of Los Angeles and of the State of California pertaining to well construction, reconstruction and destruction. Upon completion of well and within ten days thereafter, I will furnish the County Preventive/Public Health Services with a complete log of the well, giving date drilled, depth of well, all perforations in casing, and any other data deemed necessary by such County Preventive/Public Health Services.

Anand Kleber
Applicant's Signature

DISPOSITION OF APPLICATION: (For Sanitarians Use Only)

- [ ] APPROVED
- [ ] DENIED
- [ ] APPROVED WITH CONDITIONS

If denied or approved with conditions, report reason or conditions here:

DATE
DATE 5/1/96

SANITARIAN
SECTION CHIEF

76A668
H-13 (Rev. 3/91) 2/95

Post-it® Fax Note 7671	Date 9-26-95	# of pages ▶ 1
To Anand	From Luce	
Co./Dept.	Co.	
Phone #	Phone # 213/881-9147	
Fax # 714/632-6754	Fax #	

RECEIVED
SEP 26 1995
ENVIRONMENTAL AUDIT

TOTAL P.01

SERVI APPLICATION AND FEE COLLE( )ON
COUNTY OF LOS ANGELES - DEPARTMENT OF HEALTH SERVICES
PUBLIC HEALTH PROGRAMS - ENVIRONMENTAL HEALTH

RECEIVED
APR 2 2 1996

SERVICE REQUEST APPLICATION

ENVIRONMENTAL AUDIT

INSTRUCTIONS

1. Check the TYPE OF SERVICE requested and attach the required non-refundable fee to the application. Make money order or check payable to LOS ANGELES COUNTY TREASURER, DO NOT SEND CASH. This application is nontransferable.

FEE REQUIRED*		TYPE OF SERVICE
256.00	☒	MONITORING WELL CONSTRUCTION/DESTRUCTION
	☐	WELL CONSTRUCTION, RENOVATION OR DESTRUCTION PERMIT Complete and attach a Well Permit Application
	☐	PRIVATE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT
	☐	PRIVATE SEWAGE DISPOSAL SYSTEM RENOVATION/EXPANSION
	☐	INSPECTION OF MOUNTAIN CABIN SITE as required by the United States Forest Service
	☐	INSPECTION OF EXISTING PRIVATE SEWAGE SYSTEM as required by FHA/VA
	☐	WATER SUPPLY TEST AND CERTIFICATION as required by U.S. Department of Agriculture

(2)

2. Check with Contact Office stamped below for requirements or information.
3. Complete the required information or deliver the completed application, money order or check with the forms indicated.

to: County of Los Angeles
Department of Health Services
Public Health Programs
Environmental Health
2525 Corporate Place
Monterey Park, Ca 91754
(213) 881-4147

*Refer to Schedule of Fees for current fiscal year.

NOTE: FIELD PERSONNEL CANNOT ACCEPT FEES.

4. Phone Contact Office noted below, after you have received your receipt, to request an inspection.

11700 Burke Street (@ Norwalk Blvd.), Santa Fe Springs, CA 4/15/96
Service/Job Location Address — Date

Mr. Larry Patsouras, 11700 Burke St., Santa Fe Springs, CA
Owner/Applicant's Name — Address — Phone No.

Environmental Audit, Inc., 1000-A Ortega Way, Placentia, CA 714/632-8521
Contractor's Name — Address — Phone No.

Co. Engineer Plan Check No.____ Tract No. ____ Lot No. ____ No. Bedrooms ____
(Complete line above for Private Sewage Disposal System Construction or Renovation Application)

CONTACT OFFICE

DEPARTMENT STAMP

April 17, 1996 LC
Ck# 13538
Rcpt. 515940
FEE PAID

76S979 - H2124 (Rev. 3/91) 2/93 WHITE: CHIEF COPY CANARY: APPLICANT COPY PINK: SENIOR COPY

APPENDIX C: GRAPHIC GEOTECHNICAL BORING LOG

GRAPHIC GEOTECHNICAL BORING LOG

CLIENT: Larry Patsouras PROJECT NO.: 1576 DRILL HOLE: MW-2

SITE LOCATION: 11630-11700 Burke Street, Santa Fe Springs, CA 90670

DRILLING CO: Cascade Drilling TYPE OF RIG: Mobile B-61

DRILLING METHOD/EQUIPMENT: HSA HOLE DIAMETER: 8"

DRIVE WEIGHT/HEIGHT OF DROP: 140 # @ 30" REFERENCE OR DATUM: Surface

START DATE: 12/23/96 COMPLETION DATE: 12/23/96

DEPTH IN FEET	GRAPHIC BORING LOG	SAMPLE SIZE & LOCATION	BLOW COUNTS PER 0.5 FT	TIME IN HOURS	SOIL VAPOR READING, PPM	UNIFIED SOIL CLASSIFICATION SYSTEM U.S.C.S.	DESCRIPTION In Following Order: LITHOLOGY, color, grain size, sorting, angularity, fossils, consistency, wetness
0						ML	0-3" Asphalt
5			15 20 25	10:00		SM	4'-5.5' SLIGHTLY SANDY SILT, rust, very fine sand, dry.
10			17 22 30	10:05		SP	9'-10.5' VERY SILTY SAND, rust, fine sand, sligtly moist.
15			11 13 17	10:10			14'-15.5' SAND, tan, medium sand, slightly moist.
20			10 14 16	10:15			19'-20.5' SAND, tan, medium sand, slightly moist.
25			20 23 25	10:20		ML	24'-25.5' SAND, tan, medium to fine sand, rare coarse sand, slightly moist.
30			5 7 10	10:25		SM	29'-30.5' CLAYEY SILT, tan to rust, very moist.
35			10 15 25	10:30		SP	34'-35.5' SILTY SAND, tan to rust, medium sand, saturated.
40			8 14 26	10:35			39'-40.5' SAND, tan, medium sand, saturated.
45			15			ML	44'-45.5' SLIGHTLY SANDY CLAYEY SILT, rust to olive,

6.0 12.0 27.0 32.0 37.0 43.9

Continued Next Page

NOTES:
Converted to well MW-2

ENVIRONMENTAL AUDIT, INC.

NOTE: This Boring Log Represents Conditions Only at Time and Location Indicated. Subsurface Conditions May Differ at Other Locations and Times.

LOGGED BY: BMH DATE: 12/23/96 APPROVED BY: BHM RG #: 5649

GRAPHIC GEOTECHNICAL BORING LOG

CLIENT: Larry Patsouras PROJECT NO.: 1576 DRILL HOLE: MW-2

SITE LOCATION: 11630-11700 Burke Street, Santa Fe Springs, CA 90670

DRILLING CO: Cascade Drilling TYPE OF RIG: Mobile B-61

DRILLING METHOD/EQUIPMENT: HSA HOLE DIAMETER: 8"

DRIVE WEIGHT/HEIGHT OF DROP: 140 # @ 30" REFERENCE OR DATUM: Surface

START DATE: 12/23/96 COMPLETION DATE: 12/23/96

DEPTH IN FEET	GRAPHIC BORING LOG	SAMPLE SIZE & LOCATION	BLOW COUNTS PER 0.5 FT	TIME IN HOURS	SOIL VAPOR READING, PPM	UNIFIED SOIL CLASSIFICATION SYSTEM U.S.C.S.	DESCRIPTION In Following Order: LITHOLOGY, color, grain size, sorting, angularity, fossils, consistency, wetness
45			20 30	10:40			very fine sand, stiff, saturated.
50			8 15 25	10:45			49'-50.5' SLIGHTLY SANDY CLAYEY SILT, rust to olive, very fine sand, stiff, saturated.
55			23 27 30	10:50		55.5	54'-55.5' SLIGHTLY SANDY CLAYEY SILT, rust, fine sand, saturated.
60							
65							
70							
75							
80							
85							
90							

NOTES:
Converted to well MW-2

ENVIRONMENTAL AUDIT, INC.

NOTE: This Boring Log Represents Conditions Only at Time and Location Indicated. Subsurface Conditions May Differ at Other Locations and Times.

LOGGED BY: BMH DATE: 12/23/96 APPROVED BY: BHM RG #: 5649

APPENDIX D: CHAIN OF CUSTODY RECORDS AND LABORATORY REPORTS

Calscience Environmental Laboratories, Inc.

ACCREDITED

RECEIVED
JAN - 6 1997
ENVIRONMENTAL AUDIT

January 02, 1997

Ed Leonhardt
Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92670-7125

Subject: **Calscience Work Order Number:** **96-12-397**
Client Reference: **Kekropia, Inc./1576**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/23/96 and analyzed in accordance with the attached chain-of-custody.

The results in this analytical report are limited to the samples tested, and any reproduction of this report must be made in its entirety.

If you have any questions regarding this report, require sampling supplies or field services, or information on our analytical services, please feel free to call me at (714) 895-5494.

Sincerely,

Calscience Environmental
Laboratories, Inc.
William H. Christensen
Deliverables Manager

Steven L. Lane
Laboratory Director

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Environmental Audit, Inc.		Date Sampled:	12/23/96
1000-A Ortega Way		Date Received:	12/23/96
Placentia, CA 92670-7125		Date Extracted:	12/26/96
		Date Analyzed:	12/26/96
		Work Order No.:	96-12-397
Attn: Ed Leonhardt		Method:	EPA 418.1
RE: Kekropia, Inc./1576		Page 1 of 1	

All total recoverable petroleum hydrocarbon concentrations are reported in mg/kg (ppm).

Sample Number	Concentration	Reportable Limit
SS-4	7530	500
Method Blank	ND	10

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

ACCREDITED

Environmental Audit, Inc.		Date Sampled:	12/23/96
1000-A Ortega Way		Date Received:	12/23/96
Placentia, CA 92670-7125		Date Digested:	12/27/96
		Date Analyzed:	12/30/96
		Work Order No.:	96-12-397
Attn: Ed Leonhardt		Method:	EPA 6010A
RE: Kekropia, Inc./1576		Page 1 of 1	

All concentrations are reported in mg/kg (ppm). Analyses for arsenic were conducted on a total digestion.

Sample Number	Arsenic Concentration	Reportable Limit
SS-5	ND	5.0
SS-1	ND	5.0
S-3	ND	5.0
Method Blank	ND	5.0

QA/QC

Sample Number	Sample Conc.	Duplicate Conc.	%RPD	Control Limits (%)
96-12-385-21 (Duplicate)	64.8	66.4	2	0 - 20

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Environmental Audit, Inc.	Date Sampled:	12/23/96
1000-A Ortega Way	Date Received:	12/23/96
Placentia, CA 92670-7125	Date Digested:	12/27/96
	Date Analyzed:	12/27-31/96
	Work Order No.:	96-12-397
Attn: Ed Leonhardt		
RE: Kekropia, Inc./1576	Page 1 of 5	

All concentrations are reported in mg/kg (ppm). Analyses for Title 22 metals were conducted on a total digestion.

Sample Number: S-2

Analyte	Method	Concentration	Reportable Limit
Antimony	EPA 6010A	ND	6.0
Arsenic	EPA 6010A	ND	5.0
Barium	EPA 6010A	77.3	10.0
Beryllium	EPA 6010A	ND	0.6
Cadmium	EPA 6010A	1.9	1.5
Chromium	EPA 6010A	12.8	2.5
Cobalt	EPA 6010A	4.7	2.5
Copper	EPA 6010A	13.5	2.5
Lead	EPA 6010A	ND	6.0
Mercury	EPA 7471A	ND	0.25
Molybdenum	EPA 6010A	ND	2.5
Nickel	EPA 6010A	6.0	2.5
Selenium	EPA 6010A	ND	8.0
Silver	EPA 6010A	ND	2.5
Thallium	EPA 6010A	ND	8.0
Vanadium	EPA 6010A	24.7	2.5
Zinc	EPA 6010A	27.0	2.5

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

ACCREDITED

Environmental Audit, Inc.	Date Sampled:	12/23/96
1000-A Ortega Way	Date Received:	12/23/96
Placentia, CA 92670-7125	Date Digested:	12/27/96
	Date Analyzed:	12/27-31/96
	Work Order No.:	96-12-397
Attn: Ed Leonhardt		
RE: Kekropia, Inc./1576	Page 2 of 5	

All concentrations are reported in mg/kg (ppm). Analyses for Title 22 metals were conducted on a total digestion.

Sample Number: Method Blank

Analyte	Method	Concentration	Reportable Limit
Antimony	EPA 6010A	ND	6.0
Arsenic	EPA 6010A	ND	5.0
Barium	EPA 6010A	ND	10.0
Beryllium	EPA 6010A	ND	0.6
Cadmium	EPA 6010A	ND	1.5
Chromium	EPA 6010A	ND	2.5
Cobalt	EPA 6010A	ND	2.5
Copper	EPA 6010A	ND	2.5
Lead	EPA 6010A	ND	6.0
Mercury	EPA 7471A	ND	0.25
Molybdenum	EPA 6010A	ND	2.5
Nickel	EPA 6010A	ND	2.5
Selenium	EPA 6010A	ND	8.0
Silver	EPA 6010A	ND	2.5
Thallium	EPA 6010A	ND	8.0
Vanadium	EPA 6010A	ND	2.5
Zinc	EPA 6010A	ND	2.5

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

ACCREDITED

Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92670-7125

Date Sampled: 12/23/96
Date Received: 12/23/96
Date Digested: 12/27/96
Date Analyzed: 12/27-31/96
Work Order No.: 96-12-397

Attn: Ed Leonhardt
RE: Kekropia, Inc./1576

All concentrations are reported in mg/kg (ppm). Analyses for Title 22 metals were conducted on a total digestion.

Sample Number: Laboratory Control Sample

Analyte	Method	Conc. Added	Conc. Rec.	%REC	Control Limits (%)
Barium	EPA 6010A	10.0	9.80	98	80 - 120
Copper	EPA 6010A	10.0	9.36	94	80 - 120
Lead	EPA 6010A	10.0	9.17	92	80 - 120
Selenium	EPA 6010A	10.0	9.36	94	80 - 120
Silver	EPA 6010A	5.00	4.23	85	80 - 120
Thallium	EPA 6010A	10.0	8.78	88	80 - 120
Zinc	EPA 6010A	10.0	9.29	93	80 - 120

Calscience Environmental Laboratories, Inc.

ACCREDITED

ANALYTICAL REPORT

Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92670-7125

Attn: Ed Leonhardt
RE: Kekropia, Inc./1576

Date Sampled: 12/23/96
Date Received: 12/23/96
Date Digested: 12/27/96
Date Analyzed: 12/27-31/96
Work Order No.: 96-12-397

All concentrations are reported in mg/kg (ppm). Analyses for Title 22 metals were conducted on a total digestion.

QA/QC

Sample Number: 96-12-385-21 (Duplicate)

Is this duplicate for the entire batch?

Analyte	Method	Sample Conc.	Duplicate Conc.	%RPD	Control Limits (%)
Antimony	EPA 6010A	ND	ND	NA	0 - 20
Arsenic	EPA 6010A	64.8	66.4	2	0 - 20
Barium	EPA 6010A	130	129	1	0 - 20
Beryllium	EPA 6010A	0.6	0.6	0	0 - 20
Cadmium	EPA 6010A	3.3	3.4	3	0 - 20
Chromium	EPA 6010A	17.7	17.2	3	0 - 20
Cobalt	EPA 6010A	7.1	7.0	1	0 - 20
Copper	EPA 6010A	38.4	38.6	1	0 - 20
Lead	EPA 6010A	107	103	4	0 - 20
Molybdenum	EPA 6010A	ND	ND	NA	0 - 20
Nickel	EPA 6010A	15.0	15.9	6	0 - 20
Selenium	EPA 6010A	ND	ND	NA	0 - 20
Silver	EPA 6010A	ND	ND	NA	0 - 20
Thallium	EPA 6010A	ND	ND	NA	0 - 20
Vanadium	EPA 6010A	29.3	29.4	0	0 - 20
Zinc	EPA 6010A	234	240	3	0 - 20

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Environmental Audit, Inc.		Date Sampled:	12/23/96
1000-A Ortega Way		Date Received:	12/23/96
Placentia, CA 92670-7125		Date Digested:	12/27/96
		Date Analyzed:	12/27-31/96
		Work Order No.:	96-12-397
Attn: Ed Leonhardt			
RE: Kekropia, Inc./1576		Page 5 of 5	

All concentrations are reported in mg/kg (ppm). Analyses for Title 22 metals were conducted on a total digestion.

QA/QC

Sample Number: 96-12-330-1 (Duplicate)

Analyte	Method	Sample Conc.	Duplicate Conc.	%RPD	Control Limits (%)
Mercury	EPA 7471A	ND	ND	NA	0 - 20

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

EPA 8081 PCBs Only

ACCREDITED

Client Name:	Environmental Audit, Inc.		
Project ID:	Kekropia, Inc./1576		
Work Order Number:	96-12-397		
QC Batch ID:	961226sx	Date Collected:	12/23/96
Matrix:	Solid	Date Received:	12/23/96
Extraction:	EPA 3540B	Date Extracted:	12/26/96
Method:	EPA 8081	Date Analyzed:	12/31/96

Client Sample Number: **SS-4**
Lab Sample Number: 96-12-397-3
Analysis Comment: Mercury clean up carried out.

Parameter	Result	RL	Qualifiers	Units
Aroclor-1016	ND	100		ug/kg
Aroclor-1221	ND	100		ug/kg
Aroclor-1232	ND	100		ug/kg
Aroclor-1242	ND	100		ug/kg
Aroclor-1248	ND	100		ug/kg
Aroclor-1254	ND	100		ug/kg
Aroclor-1260	ND	100		ug/kg
Aroclor-1262	ND	100		ug/kg

Surrogates:	REC (%)	Control Limits	Qualifiers
Decachlorobiphenyl	57	50-130	
2,4,5,6-Tetrachloro-m-Xylene	68	50-130	

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

EPA 8081 PCBs Only

ACCREDITED

Client Name:	Environmental Audit, Inc.		
Project ID:	Kekropia, Inc./1576		
Work Order Number:	96-12-397		
QC Batch ID:	961226sx	Date Collected:	N/A
Matrix:	Solid	Date Received:	N/A
Extraction:	EPA 3540B	Date Extracted:	12/26/96
Method:	EPA 8081	Date Analyzed:	12/31/96

Client Sample Number: **Method Blank**
Lab Sample Number: 095-01-014-442

Parameter	Result	RL	Qualifiers	Units
Aroclor-1016	ND	100		ug/kg
Aroclor-1221	ND	100		ug/kg
Aroclor-1232	ND	100		ug/kg
Aroclor-1242	ND	100		ug/kg
Aroclor-1248	ND	100		ug/kg
Aroclor-1254	ND	100		ug/kg
Aroclor-1260	ND	100		ug/kg
Aroclor-1262	ND	100		ug/kg

Surrogates:	REC (%)	Control Limits	Qualifiers
Decachlorobiphenyl	71	50-130	
2,4,5,6-Tetrachloro-m-Xylene	75	50-130	

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

EPA 8270B Semi-volatile Organics

ACCREDITED

Client Name:	Environmental Audit, Inc.		
Project ID:	Kekropia, Inc./1576		
Work Order Number:	96-12-397		
QC Batch ID:	1226-1	Date Collected:	12/23/96
Matrix:	Solid	Date Received:	12/23/96
Extraction:	EPA 3540B	Date Extracted:	12/26/96
Method:	EPA 8270B	Date Analyzed:	12/27/96

Client Sample Number: **SS-4**
Lab Sample Number: 96-12-397-3

Parameter	Result	RL	Qualifiers	Units
N-Nitrosodimethylamine	ND	0.5		mg/kg
Aniline	ND	0.5		mg/kg
Phenol	ND	0.5		mg/kg
Bis(2-Chloroethyl) Ether	ND	0.5		mg/kg
2-Chlorophenol	ND	0.5		mg/kg
1,3-Dichlorobenzene	ND	0.2		mg/kg
1,4-Dichlorobenzene	ND	0.2		mg/kg
Benzyl Alcohol	ND	2		mg/kg
1,2-Dichlorobenzene	ND	0.2		mg/kg
2-Methylphenol	ND	0.5		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.5		mg/kg
4-Methylphenol	ND	0.5		mg/kg
N-Nitroso-di-n-propylamine	ND	2		mg/kg
Hexachloroethane	ND	0.2		mg/kg
Nitrobenzene	ND	0.2		mg/kg
Isophorone	ND	0.2		mg/kg
2-Nitrophenol	ND	0.2		mg/kg
2,4-Dimethylphenol	ND	0.2		mg/kg
Benzoic Acid	ND	2		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.2		mg/kg
2,4-Dichlorophenol	ND	0.5		mg/kg
1,2,4-Trichlorobenzene	ND	0.2		mg/kg
Naphthalene	ND	0.2		mg/kg
4-Chloroaniline	ND	0.5		mg/kg
Hexachloro-1,3-Butadiene	ND	0.2		mg/kg
4-Chloro-3-Methylphenol	ND	0.5		mg/kg
2-Methylnaphthalene	ND	0.2		mg/kg
Hexachlorocyclopentadiene	ND	0.5		mg/kg
2,4,5-Trichlorophenol	ND	0.5		mg/kg
2-Chloronaphthalene	ND	0.2		mg/kg
2-Nitroaniline	ND	2		mg/kg
Dimethyl Phthalate	ND	0.2		mg/kg
Acenaphthylene	ND	0.2		mg/kg

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

EPA 8270B Semi-volatile Organics

ACCREDITED

Client Name:	Environmental Audit, Inc.		
Project ID:	Kekropia, Inc./1576		
Work Order Number:	96-12-397		
QC Batch ID:	1226-1	Date Collected:	12/23/96
Matrix:	Solid	Date Received:	12/23/96
Extraction:	EPA 3540B	Date Extracted:	12/26/96
Method:	EPA 8270B	Date Analyzed:	12/27/96

Client Sample Number: **SS-4**

Lab Sample Number: 96-12-397-3

Parameter	Result	RL	Qualifiers	Units
3-Nitroaniline	ND	2		mg/kg
Acenaphthene	ND	0.2		mg/kg
2,4-Dinitrophenol	ND	2		mg/kg
4-Nitrophenol	ND	2		mg/kg
Dibenzofuran	ND	0.2		mg/kg
2,4-Dinitrotoluene	ND	0.2		mg/kg
2,6-Dinitrotoluene	ND	0.2		mg/kg
Diethyl Phthalate	ND	0.2		mg/kg
4-Chlorophenyl-Phenyl Ether	ND	0.2		mg/kg
Fluorene	ND	0.2		mg/kg
4-Nitroaniline	ND	2		mg/kg
Azobenzene	ND	0.2		mg/kg
4,6-Dinitro-2-Methylphenol	ND	2		mg/kg
N-Nitrosodiphenylamine	ND	2		mg/kg
2,4,6-Trichlorophenol	ND	2		mg/kg
4-Bromophenyl-Phenyl Ether	ND	0.2		mg/kg
Hexachlorobenzene	ND	0.2		mg/kg
Pentachlorophenol	ND	2		mg/kg
Phenanthrene	ND	0.2		mg/kg
Anthracene	ND	0.2		mg/kg
Di-n-Butyl Phthalate	ND	40		mg/kg
Fluoranthene	ND	0.2		mg/kg
Benzidine	ND	2.0		mg/kg
Pyrene	ND	0.2		mg/kg
Butyl Benzyl Phthalate	ND	0.2		mg/kg
3,3'-Dichlorobenzidine	ND	2.0		mg/kg
Benzo (a) Anthracene	ND	0.2		mg/kg
Bis(2-Ethylhexyl) Phthalate	ND	2.0		mg/kg
Chrysene	ND	0.2		mg/kg
Di-n-Octyl Phthalate	ND	1.0		mg/kg
Benzo (b and k) Fluoranthenes	ND	1.0		mg/kg
Benzo (a) Pyrene	ND	0.2		mg/kg
Indeno (1,2,3-c,d) Pyrene	ND	1.0		mg/kg

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

EPA 8270B Semi-volatile Organics

ACCREDITED

Client Name:	Environmental Audit, Inc.		
Project ID:	Kekropia, Inc./1576		
Work Order Number:	96-12-397		
QC Batch ID:	1226-1	Date Collected:	12/23/96
Matrix:	Solid	Date Received:	12/23/96
Extraction:	EPA 3540B	Date Extracted:	12/26/96
Method:	EPA 8270B	Date Analyzed:	12/27/96

Client Sample Number: **SS-4**
Lab Sample Number: 96-12-397-3

Parameter	Result	RL	Qualifiers	Units
Dibenz (a,h) Anthracene	ND	1.0		mg/kg
Benzo (g,h,i) Perylene	ND	1.0		mg/kg

Surrogates:	REC (%)	Control Limits	Qualifiers
2-Fluorophenol	101	25-121	
p-Terphenyl-d14	103	18-137	
2,4,6-Tribromophenol	111	19-122	
2-Fluorobiphenyl	110	30-115	
Nitrobenzene-d5	81	23-120	
Phenol-d6	105	24-113	

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

EPA 8270B Semi-volatile Organics

ACCREDITED

Client Name:	Environmental Audit, Inc.		
Project ID:	Kekropia, Inc./1576		
Work Order Number:	96-12-397		
QC Batch ID:	1226-1	Date Collected:	N/A
Matrix:	Solid	Date Received:	N/A
Extraction:	EPA 3540B	Date Extracted:	12/26/96
Method:	EPA 8270B	Date Analyzed:	12/27/96

Client Sample Number: **Method Blank**
Lab Sample Number: 095-01-002-100

Parameter	Result	RL	Qualifiers	Units
N-Nitrosodimethylamine	ND	0.5		mg/kg
Aniline	ND	0.5		mg/kg
Phenol	ND	0.5		mg/kg
Bis(2-Chloroethyl) Ether	ND	0.5		mg/kg
2-Chlorophenol	ND	0.5		mg/kg
1,3-Dichlorobenzene	ND	0.2		mg/kg
1,4-Dichlorobenzene	ND	0.2		mg/kg
Benzyl Alcohol	ND	2		mg/kg
1,2-Dichlorobenzene	ND	0.2		mg/kg
2-Methylphenol	ND	0.5		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.5		mg/kg
4-Methylphenol	ND	0.5		mg/kg
N-Nitroso-di-n-propylamine	ND	2		mg/kg
Hexachloroethane	ND	0.2		mg/kg
Nitrobenzene	ND	0.2		mg/kg
Isophorone	ND	0.2		mg/kg
2-Nitrophenol	ND	0.2		mg/kg
2,4-Dimethylphenol	ND	0.2		mg/kg
Benzoic Acid	ND	2		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.2		mg/kg
2,4-Dichlorophenol	ND	0.5		mg/kg
1,2,4-Trichlorobenzene	ND	0.2		mg/kg
Naphthalene	ND	0.2		mg/kg
4-Chloroaniline	ND	0.5		mg/kg
Hexachloro-1,3-Butadiene	ND	0.2		mg/kg
4-Chloro-3-Methylphenol	ND	0.5		mg/kg
2-Methylnaphthalene	ND	0.2		mg/kg
Hexachlorocyclopentadiene	ND	0.5		mg/kg
2,4,5-Trichlorophenol	ND	0.5		mg/kg
2-Chloronaphthalene	ND	0.2		mg/kg
2-Nitroaniline	ND	2		mg/kg
Dimethyl Phthalate	ND	0.2		mg/kg
Acenaphthylene	ND	0.2		mg/kg

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

EPA 8270B Semi-volatile Organics

ACCREDITED

Client Name:	Environmental Audit, Inc.		
Project ID:	Kekropia, Inc./1576		
Work Order Number:	96-12-397		
QC Batch ID:	1226-1	Date Collected:	N/A
Matrix:	Solid	Date Received:	N/A
Extraction:	EPA 3540B	Date Extracted:	12/26/96
Method:	EPA 8270B	Date Analyzed:	12/27/96

Client Sample Number: **Method Blank**
Lab Sample Number: 095-01-002-100

Parameter	Result	RL	Qualifiers	Units
3-Nitroaniline	ND	2		mg/kg
Acenaphthene	ND	0.2		mg/kg
2,4-Dinitrophenol	ND	2		mg/kg
4-Nitrophenol	ND	2		mg/kg
Dibenzofuran	ND	0.2		mg/kg
2,4-Dinitrotoluene	ND	0.2		mg/kg
2,6-Dinitrotoluene	ND	0.2		mg/kg
Diethyl Phthalate	ND	0.2		mg/kg
4-Chlorophenyl-Phenyl Ether	ND	0.2		mg/kg
Fluorene	ND	0.2		mg/kg
4-Nitroaniline	ND	2		mg/kg
Azobenzene	ND	0.2		mg/kg
4,6-Dinitro-2-Methylphenol	ND	2		mg/kg
N-Nitrosodiphenylamine	ND	2		mg/kg
2,4,6-Trichlorophenol	ND	2		mg/kg
4-Bromophenyl-Phenyl Ether	ND	0.2		mg/kg
Hexachlorobenzene	ND	0.2		mg/kg
Pentachlorophenol	ND	2		mg/kg
Phenanthrene	ND	0.2		mg/kg
Anthracene	ND	0.2		mg/kg
Di-n-Butyl Phthalate	ND	40		mg/kg
Fluoranthene	ND	0.2		mg/kg
Benzidine	ND	2.0		mg/kg
Pyrene	ND	0.2		mg/kg
Butyl Benzyl Phthalate	ND	0.2		mg/kg
3,3'-Dichlorobenzidine	ND	2.0		mg/kg
Benzo (a) Anthracene	ND	0.2		mg/kg
Bis(2-Ethylhexyl) Phthalate	ND	2.0		mg/kg
Chrysene	ND	0.2		mg/kg
Di-n-Octyl Phthalate	ND	1.0		mg/kg
Benzo (b and k) Fluoranthenes	ND	1.0		mg/kg
Benzo (a) Pyrene	ND	0.2		mg/kg
Indeno (1,2,3-c,d) Pyrene	ND	1.0		mg/kg

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

EPA 8270B Semi-volatile Organics

ACCREDITED

Client Name:	Environmental Audit, Inc.		
Project ID:	Kekropia, Inc./1576		
Work Order Number:	96-12-397		
QC Batch ID:	1226-1	Date Collected:	N/A
Matrix:	Solid	Date Received:	N/A
Extraction:	EPA 3540B	Date Extracted:	12/26/96
Method:	EPA 8270B	Date Analyzed:	12/27/96

Client Sample Number: **Method Blank**
Lab Sample Number: 095-01-002-100

Parameter	Result	RL	Qualifiers	Units
Dibenz (a,h) Anthracene	ND	1.0		mg/kg
Benzo (g,h,i) Perylene	ND	1.0		mg/kg

Surrogates:	REC (%)	Control Limits	Qualifiers
2-Fluorophenol	110	25-121	
p-Terphenyl-d14	106	18-137	
2,4,6-Tribromophenol	78	19-122	
2-Fluorobiphenyl	99	30-115	
Nitrobenzene-d5	84	23-120	
Phenol-d6	106	24-113	

Calscience Environmental Laboratories, Inc.

ACCREDITED

QUALITY ASSURANCE SUMMARY

Method EPA 418.1

Environmental Audit, Inc.		Work Order No.:	96-12-397
Page 1 of 1		Date Analyzed:	12/26/96

Matrix Spike/Matrix Spike Duplicate

Sample Spiked: 96-12-376-13

Analyte	MS%REC	MSD%REC	Control Limits	%RPD	Control Limits
Total Recoverable Petroleum Hydrocarbons	102	97	55 - 135	5	0 - 30

Calscience Environmental Laboratories, Inc.

QUALITY ASSURANCE SUMMARY

ICP / GF Metals (Solids)

Environmental Audit, Inc. | Work Order No.: 96-12-397
Page 1 of 1 | Date Analyzed: 12/20-30/96

Matrix Spike

Sample Spiked: 96-12-385-21

Analyte	Method	Sample Conc.	Spike Added	MS Conc.	%REC	Control Limits
Antimony	EPA 6010A	ND	50.0	43.7	87	80 - 120
Arsenic	EPA 6010A	64.8	50.0	105	80	80 - 120
Barium	EPA 6010A	130	50.0	169	78 Note 1	80 - 120
Beryllium	EPA 6010A	0.6	50.0	43.1	85	80 - 120
Cadmium	EPA 6010A	3.3	50.0	44.6	83	80 - 120
Chromium	EPA 6010A	17.7	50.0	63.4	91	80 - 120
Cobalt	EPA 6010A	7.1	50.0	49.8	85	80 - 120
Copper	EPA 6010A	38.4	50.0	99.2	122 Note 1	80 - 120
Lead	EPA 6010A	107	50.0	104	Note 1	80 - 120
Molybdenum	EPA 6010A	ND	50.0	42.4	85	80 - 120
Nickel	EPA 6010A	15.0	50.0	57.6	85	80 - 120
Selenium	EPA 6010A	ND	50.0	39.4	79 Note 1	80 - 120
Silver	EPA 6010A	ND	25.0	0.5	2 Note 1	80 - 120
Thallium	EPA 6010A	ND	50.0	25.1	50 Note 1	80 - 120
Vanadium	EPA 6010A	29.3	50.0	81.2	104	80 - 120
Zinc	EPA 6010A	234	50.0	382	296 Note 1	80 - 120

Matrix Spike

Sample Spiked: 96-12-330-1

Analyte	Method	Sample Conc.	Spike Added	MS Conc.	%REC	Control Limits
Mercury	EPA 7471A	ND	2.50	2.60	104	50 - 130

1. The MS associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS was in control and, hence, the associated sample data was reported with no further corrective action required.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

EPA 8270B Semi-volatile Organics

ACCREDITED

MS/MSD Batch Number:	397-3	Instrument:	GC/MS F
Matrix:	Solid	Date Extracted:	12/26/96
Method:	EPA 8270B	Date Analyzed:	12/27/96

Spiked Sample ID: SS-4

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	82	89	20-120	8	0-42	
2-Chlorophenol	94	97	23-134	3	0-40	
1,4-Dichlorobenzene	81	87	20-124	7	0-28	
N-Nitroso-di-n-propylamine	87	95	0-230	8	0-38	
1,2,4-Trichlorobenzene	87	92	44-142	5	0-28	
Acenaphthene	103	109	47-145	5	0-31	
2,4-Dinitrotoluene	60	78	39-139	26	0-38	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

EPA 8270B Semi-volatile Organics

ACCREDITED

LCS/LCSD Batch Number:	1226-1	Instrument:	GC/MS F
Matrix:	Solid	Date Extracted:	12/26/96
Method:	EPA 8270B	Date Analyzed:	12/27/96

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	101	99	20-120	2	0-42	
2-Chlorophenol	109	89	23-134	20	0-40	
1,4-Dichlorobenzene	97	89	20-124	8	0-28	
N-Nitroso-di-n-propylamine	104	100	0-230	3	0-38	
1,2,4-Trichlorobenzene	97	96	44-142	1	0-28	
Acenaphthene	111	96	47-145	14	0-31	
2,4-Dinitrotoluene	100	95	39-139	5	0-38	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

EPA 8081 PCBs Only

ACCREDITED

LCS/LCSD Batch Number:	961226sx	Instrument:	GC 16
Matrix:	Solid	Date Extracted:	12/26/96
Method:	EPA 8081	Date Analyzed:	12/31/96

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1260	80	90	50-135	11	0-25	

Calscience Environmental Laboratories, Inc.

GLOSSARY OF TERMS AND QUALIFIERS

ACCREDITED

Work Order Number: 96-12-397

Qualifier	Definition
ND	Not detected at indicated reporting limit.

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PAGE 1 of 1

ENVIRONMENTAL AUDIT, INC.®

Planning, Environmental Analyses and Hazardous Substances Management and Remediation

1000 ORTEGA WAY, SUITE A
PLACENTIA, CA 92670-7125
☎ (714) 632 - 8521
FAX (714) 632 - 6754

Chain of Custody Record

SAMPLING REQUIREMENTS: RCRA ☐ NPDES ☐ SDWA ☐ _____ ☐

WRITTEN QC REPORT
ROUTINE QC ☒
RWQCB QC ☐

TURNAROUND TIME:
SAME DAY ☐ 24hr ☐ 48hr ☐ NORMAL ☒

PROJECT NO.: 1576

PROJECT NAME: Kekropia, Inc. 11630-11700 Gilke Street Santa Fe Springs, CA

SAMPLER (Signature with Printed Name): John R. Cimbricz

PROJECT MANAGER: Ed Leonhardt

SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION	CONTR TYPE: GLASS	PLASTIC	BRASS/SS TUBE	ANALYSES REQUESTED: TPH-D 8015M	TPH-G 8015M	TRPH 418.1	BTEX 8020	VOC 8240	EOC 8270	OIL & GREASE	CAM METALS (TOTWET)	LEAD	HVOC 8010	Arsenic	PCBs	Styrene			NUMBER OF CONTAINERS	REMARKS
SS-5	12/23/96	10:10			-Soil @ 15-18"	1													1					1	
SS-1	"	10:20			-Soil @ 3-4"	1													1					1	
SS-4	"	11:15			-Soil @ 24"	1					1									1	1			1	
S-3	"	11:35			-Soil @ 3-4"	1													1					1	
S-2	"	11:45			-Soil @ 3-4"	1										1								1	

TOTAL NUMBER OF CONTAINERS: 5

RELINQUISHED BY: (Signature/Name)	DATE/TIME	RECEIVED BY: (Signature/Name)	RELINQUISHED BY: (Signature/Name)	DATE/TIME	RECEIVED BY: (Signature/Name)
John R Cimbricz	12/23/96 14:30	Donna Dostalek 12/23/96 14:31	Donna Dostalek	12/23/96 1430	
RELINQUISHED BY: (Signature/Name)	DATE/TIME	RECEIVED BY: (Signature/Name)	RELINQUISHED BY: (Signature/Name)	DATE/TIME	RECEIVED BY: (Signature/Name)

SAMPLES SHIPPED VIA:
FEDEX ☐ UPS ☐ AIRBORNE ☐
HAND ☐ AIRFREIGHT ☐ _____ ☐

SHIPPED BY: (Signature/Name)

AIRBILL #:

COURIER: (Signature/Name)

RECEIVED FOR BY: (Signature/Name)

LAB: CEL

DATE/TIME: 12/23/96 2030

Rev 10/94 COC.CDR

Calscience Environmental Laboratories, Inc.

ACCREDITED

RECEIVED

JAN 14 1997

ENVIRONMENTAL AUDIT

January 07, 1997

Ed Leonhardt
Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92670-7125

Subject: **Calscience Work Order Number: 96-12-397**
Client Reference: Kekropia, Inc./1576

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/23/96 and analyzed in accordance with the attached chain-of-custody.

The results in this analytical report are limited to the samples tested, and any reproduction of this report must be made in its entirety.

If you have any questions regarding this report, require sampling supplies or field services, or information on our analytical services, please feel free to call me at (714) 895-5494.

Sincerely,

Calscience Environmental
Laboratories, Inc.
William H. Christensen
Deliverables Manager

Steven L. Lane
Laboratory Director

Calscience
Environmental
Laboratories, Inc.

ACCREDITED

ANALYTICAL REPORT

Environmental Audit, Inc.	Date Sampled:	12/23/96
1000-A Ortega Way	Date Received:	12/23/96
Placentia, CA 92670-7125	Date Extracted:	01/06/97
	Date Analyzed:	01/06/97
	Work Order No.:	96-12-397
Attn: Ed Leonhardt	Method: EPA 8015M with Carbon Chain	
RE: Kekropia, Inc./1576	Page 1 of 2	

All concentrations are reported in mg/kg (ppm).

Analyte	Concentration	Reportable Limit
Sample Number: SS-4		
C7	ND	100
C8	ND	100
C9-C10	ND	100
C11-C12	ND	100
C13-C14	ND	100
C15-C16	103	100
C17-C18	640	100
C19-C20	1400	100
C21-C22	2190	100
C23-C24	861	100
C25-C28	1680	100
C29-C32	1240	100
C33-C36	190	100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

ACCREDITED

Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92670-7125

Attn: Ed Leonhardt
RE: Kekropia, Inc./1576

Date Sampled: 12/23/96
Date Received: 12/23/96
Date Extracted: 01/06/97
Date Analyzed: 01/06/97
Work Order No.: 96-12-397
Method: EPA 8015M with Carbon Chain

All concentrations are reported in mg/kg (ppm).

Analyte	Concentration	Reportable Limit
Sample Number: Method Blank		
C7	ND	10
C8	ND	10
C9-C10	ND	10
C11-C12	ND	10
C13-C14	ND	10
C15-C16	ND	10
C17-C18	ND	10
C19-C20	ND	10
C21-C22	ND	10
C23-C24	ND	10
C25-C28	ND	10
C29-C32	ND	10
C33-C36	ND	10

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

Calscience Environmental Laboratories, Inc.

ACCREDITED

QUALITY ASSURANCE SUMMARY

Method EPA 8015M with Carbon Chain

Environmental Audit, Inc.		Work Order No.:	96-12-397
Page 1 of 1		Date Analyzed:	01/04/97

Matrix Spike/Matrix Spike Duplicate

Sample Spiked: 96-12-464-8

Analyte	MS%REC	MSD%REC	Control Limits	%RPD	Control Limits
Total Petroleum Hydrocarbons	104	99	55 - 135	5	0 - 30

Calscience
Environmental
Laboratories, Inc.

ACCREDITED

January 22, 1997

RECEIVED
JAN 24 1997
ENVIRONMENTAL AUDIT

Ed Leonhardt
Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92670-7125

Subject: **Calscience Work Order Number:** **97-01-104**
Client Reference: **Burke St./1576**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 01/13/97 and analyzed in accordance with the attached chain-of-custody.

The results in this analytical report are limited to the samples tested, and any reproduction of this report must be made in its entirety.

If you have any questions regarding this report, require sampling supplies or field services, or information on our analytical services, please feel free to call me at (714) 895-5494.

Sincerely,

Calscience Environmental
Laboratories, Inc.
William H. Christensen
Deliverables Manager

Steven L. Lane
Laboratory Director

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

ACCREDITED

Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92670-7125

Attn: Ed Leonhardt
RE: Burke St./1576

Date Sampled: 01/13/97
Date Received: 01/13/97
Date Digested: 01/15/97
Date Analyzed: 01/15-18/97
Work Order No.: 97-01-104

All concentrations are reported in mg/L (ppm). Analyses for Title 22 metals were conducted on a total digestion.

Sample Number: MW-2

Analyte	Method	Concentration	Reportable Limit
Antimony	EPA 200.7	ND	0.1
Arsenic	EPA 200.7	ND	0.1
Barium	EPA 200.7	0.44	0.02
Beryllium	EPA 200.7	ND	0.01
Cadmium	EPA 200.7	ND	0.02
Chromium	EPA 200.7	0.09	0.03
Cobalt	EPA 200.7	0.04	0.03
Copper	EPA 200.7	0.08	0.05
Lead	EPA 200.7	ND	0.12
Mercury	EPA 245.1	ND	0.0005
Molybdenum	EPA 200.7	ND	0.05
Nickel	EPA 200.7	0.05	0.04
Selenium	EPA 200.7	ND	0.1
Silver	EPA 200.7	ND	0.02
Thallium	EPA 200.7	ND	0.16
Vanadium	EPA 200.7	0.14	0.03
Zinc	EPA 200.7	0.19	0.03

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

ACCREDITED

Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92670-7125

Date Sampled: 01/13/97
Date Received: 01/13/97
Date Digested: 01/15/97
Date Analyzed: 01/15-20/97
Work Order No.: 97-01-104

Attn: Ed Leonhardt
RE: Burke St./1576

All concentrations are reported in mg/L (ppm). Analyses for Title 22 metals were conducted on a total digestion.

Sample Number: MW-1

Analyte	Method	Concentration	Reportable Limit
Antimony	EPA 200.7	ND	0.1
Arsenic	EPA 200.7	ND	0.1
Barium	EPA 200.7	0.52	0.02
Beryllium	EPA 200.7	ND	0.01
Cadmium	EPA 200.7	ND	0.02
Chromium	EPA 200.7	0.08	0.03
Cobalt	EPA 200.7	ND	0.03
Copper	EPA 200.7	0.07	0.05
Lead	EPA 200.7	ND	0.12
Mercury	EPA 245.1	ND	0.0005
Molybdenum	EPA 200.7	ND	0.05
Nickel	EPA 200.7	ND	0.04
Selenium	EPA 200.7	ND	0.1
Silver	EPA 200.7	ND	0.02
Thallium	EPA 200.7	ND	0.16
Vanadium	EPA 200.7	0.13	0.03
Zinc	EPA 200.7	0.15	0.03

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Environmental Audit, Inc.	Date Sampled:	01/13/97
1000-A Ortega Way	Date Received:	01/13/97
Placentia, CA 92670-7125	Date Digested:	01/15/97
	Date Analyzed:	01/15-20/97
	Work Order No.:	97-01-104
Attn: Ed Leonhardt		
RE: Burke St./1576	Page 3 of 7	

All concentrations are reported in mg/L (ppm). Analyses for Title 22 metals were conducted on a filtered sample.

Sample Number: MW-2 (Filtered)

Analyte	Method	Concentration	Reportable Limit
Antimony	EPA 200.7	ND	0.1
Arsenic	EPA 200.7	ND	0.1
Barium	EPA 200.7	ND	0.02
Beryllium	EPA 200.7	ND	0.01
Cadmium	EPA 200.7	ND	0.02
Chromium	EPA 200.7	ND	0.03
Cobalt	EPA 200.7	ND	0.03
Copper	EPA 200.7	ND	0.05
Lead	EPA 200.7	ND	0.12
Mercury	EPA 245.1	ND	0.0005
Molybdenum	EPA 200.7	ND	0.05
Nickel	EPA 200.7	ND	0.04
Selenium	EPA 200.7	ND	0.1
Silver	EPA 200.7	DN	0.02
Thallium	EPA 200.7	ND	0.16
Vanadium	EPA 200.7	ND	0.03
Zinc	EPA 200.7	ND	0.03

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Environmental Audit, Inc.	Date Sampled:	01/13/97
1000-A Ortega Way	Date Received:	01/13/97
Placentia, CA 92670-7125	Date Digested:	01/15/97
	Date Analyzed:	01/15-20/97
	Work Order No.:	97-01-104
Attn: Ed Leonhardt		
RE: Burke St./1576	Page 4 of 7	

All concentrations are reported in mg/L (ppm). Analyses for Title 22 metals were conducted on a filtered sample.

Sample Number: MW-1 (Filtered)

Analyte	Method	Concentration	Reportable Limit
Antimony	EPA 200.7	ND	0.1
Arsenic	EPA 200.7	ND	0.1
Barium	EPA 200.7	ND	0.02
Beryllium	EPA 200.7	ND	0.01
Cadmium	EPA 200.7	ND	0.02
Chromium	EPA 200.7	ND	0.03
Cobalt	EPA 200.7	ND	0.03
Copper	EPA 200.7	ND	0.05
Lead	EPA 200.7	ND	0.12
Mercury	EPA 245.1	ND	0.0005
Molybdenum	EPA 200.7	ND	0.05
Nickel	EPA 200.7	ND	0.04
Selenium	EPA 200.7	ND	0.1
Silver	EPA 200.7	ND	0.02
Thallium	EPA 200.7	ND	0.16
Vanadium	EPA 200.7	ND	0.03
Zinc	EPA 200.7	ND	0.03

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

ACCREDITED

Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92670-7125

Attn: Ed Leonhardt
RE: Burke St./1576

Date Sampled: 01/13/97
Date Received: 01/13/97
Date Digested: 01/15/97
Date Analyzed: 01/15-18/97
Work Order No.: 97-01-104

All concentrations are reported in mg/L (ppm). Analyses for Title 22 metals were conducted on a total digestion.

Sample Number: Method Blank

Analyte	Method	Concentration	Reportable Limit
Antimony	EPA 200.7	ND	0.1
Arsenic	EPA 200.7	ND	0.1
Barium	EPA 200.7	ND	0.02
Beryllium	EPA 200.7	ND	0.01
Cadmium	EPA 200.7	ND	0.02
Chromium	EPA 200.7	ND	0.03
Cobalt	EPA 200.7	ND	0.03
Copper	EPA 200.7	ND	0.05
Lead	EPA 200.7	ND	0.12
Mercury	EPA 245.1	ND	0.0005
Molybdenum	EPA 200.7	ND	0.05
Nickel	EPA 200.7	ND	0.04
Selenium	EPA 200.7	ND	0.1
Silver	EPA 200.7	ND	0.02
Thallium	EPA 200.7	ND	0.16
Vanadium	EPA 200.7	ND	0.03
Zinc	EPA 200.7	ND	0.03

Calscience Environmental Laboratories, Inc.

ACCREDITED

ANALYTICAL REPORT

Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92670-7125

Attn: Ed Leonhardt
RE: Burke St./1576

Date Sampled: 01/13/97
Date Received: 01/13/97
Date Digested: 01/15/97
Date Analyzed: 01/15-18/97
Work Order No.: 97-01-104

All concentrations are reported in mg/L (ppm). Analyses for Title 22 metals were conducted on a total digestion.

QA/QC

Analyte	Method	Conc. Added	Conc. Rec.	%REC	Control Limits (%)
Sample Number: Laboratory Control Sample					
Silver	EPA 200.7	0.50	0.55	110	80 - 120

Analyte	Method	Sample Conc.	Duplicate Conc.	%RPD	Control Limits (%)
Sample Number: MW-2 (Duplicate)					
Antimony	EPA 200.7	ND	ND	NA	0 - 20
Arsenic	EPA 200.7	ND	ND	NA	0 - 20
Barium	EPA 200.7	0.44	0.43	2	0 - 20
Beryllium	EPA 200.7	ND	ND	NA	0 - 20
Cadmium	EPA 200.7	ND	ND	NA	0 - 20
Chromium	EPA 200.7	0.09	0.09	0	0 - 20
Cobalt	EPA 200.7	0.04	0.04	0	0 - 20
Copper	EPA 200.7	0.08	0.07	13	0 - 20
Lead	EPA 200.7	ND	ND	NA	0 - 20
Molybdenum	EPA 200.7	ND	ND	NA	0 - 20
Nickel	EPA 200.7	0.05	0.04	22*	0 - 20
Selenium	EPA 200.7	ND	ND	NA	0 - 20
Silver	EPA 200.7	ND	ND	NA	0 - 20
Thallium	EPA 200.7	ND	ND	NA	0 - 20
Vanadium	EPA 200.7	0.14	0.14	0	0 - 20
Zinc	EPA 200.7	0.19	0.19	0	0 - 20

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

ACCREDITED

Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92670-7125

Attn: Ed Leonhardt
RE: Burke St./1576

Date Sampled: 01/13/97
Date Received: 01/13/97
Date Digested: 01/15/97
Date Analyzed: 01/15-18/97
Work Order No.: 97-01-104

All concentrations are reported in mg/L (ppm).

QA/QC

Analyte	Method	Sample Conc.	Duplicate Conc.	%RPD	Control Limits (%)
Sample Number: MW-1 (Duplicate)					
Mercury	EPA 245.1	ND	ND	NA	0 - 20

*Out of range due to low concentration.

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

Calscience Environmental Laboratories, Inc.

ACCREDITED

ANALYTICAL REPORT

Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92670-7125

Attn: Ed Leonhardt
RE: Burke St./1576

Date Sampled: 01/13/97
Date Received: 01/13/97
Date Extracted: P/T
Date Analyzed: 01/16/97
Work Order No.: 97-01-104
Method: EPA 524.2

Report for sample number MW-2. All concentrations are reported in µg/L (ppb). ND denotes not detected at indicated reportable limit. DF and RL denote dilution factor and reporting limit, respectively. Each sample was received in a chilled state, intact, and with chain-of-custody attached.

Analyte	Blank	Sample	RL	DF	Analyte	Blank	Sample	RL	DF
Dichlorodifluoromethane	ND	ND	0.5	1	2-Hexanone	ND	ND	0.5	1
Chloromethane	ND	ND	0.5	1	Toluene	ND	ND	0.5	1
Vinyl Chloride	ND	ND	0.5	1	t-1,3-Dichloropropene	ND	ND	0.5	1
Bromomethane	ND	ND	0.5	1	1,1,2-Trichloroethane	ND	ND	0.5	1
Chloroethane	ND	ND	0.5	1	Tetrachloroethene	ND	296	20	20
Iodomethane	ND	ND	0.5	1	1,3-Dichloropropane	ND	ND	0.5	1
Trichlorofluoromethane	ND	ND	0.5	1	Dibromochloromethane	ND	ND	0.5	1
Acetone	ND	ND	2.0	1	1,2-Dibromoethane	ND	ND	0.5	1
1,1-Dichloroethene	ND	33.2	0.5	1	Chlorobenzene	ND	ND	0.5	1
Methylene Chloride	ND	ND	0.5	1	1,1,1,2-Tetrachloroethane	ND	ND	0.5	1
Methyl-t-Butyl Ether	ND	ND	0.5	1	Ethylbenzene	ND	ND	0.5	1
t-1,2 Dichloroethene	ND	ND	0.5	1	m/p-Xylene	ND	ND	0.5	1
Carbon Disulfide	ND	ND	0.5	1	o-Xylene	ND	ND	0.5	1
Diethyl Ether	ND	ND	0.5	1	Styrene	ND	ND	0.5	1
1,1-Dichloroethane	ND	1.3	0.5	1	Bromoform	ND	ND	0.5	1
Methyl Acrylate	ND	ND	0.5	1	Isopropylbenzene	ND	ND	0.5	1
Chloroacetonitrile	ND	ND	0.5	1	Bromobenzene	ND	ND	0.5	1
2-Butanone	ND	ND	1.0	1	1,1,2,2-Tetrachloroethane	ND	ND	0.5	1
2,2-Dichloropropane	ND	ND	0.5	1	1,2,3-Trichloropropane	ND	ND	0.5	1
c-1,2-Dichloroethene	ND	ND	0.5	1	n-Propylbenzene	ND	ND	0.5	1
Bromochloromethane	ND	ND	0.5	1	2-Chlorotoluene	ND	ND	0.5	1
Chloroform	ND	1.5	0.5	1	4-Chlorotoluene	ND	ND	0.5	1
1,1,1-Trichloroethane	ND	7.9	0.5	1	1,3,5-Trimethylbenzene	ND	ND	0.5	1
1-Chlorobutane	ND	ND	0.5	1	t-Butylbenzene	ND	ND	0.5	1
Allyl Chloride	ND	ND	0.5	1	s-Butylbenzene	ND	ND	0.5	1
Methacrylonitrile	ND	ND	1.0	1	1,2,4-Trimethylbenzene	ND	ND	0.5	1
Methyl Methacrylate	ND	ND	0.5	1	4-Isopropyltoluene	ND	ND	0.5	1
Ethyl Methacrylate	ND	ND	0.5	1	1,3-Dichlorobenzene	ND	ND	0.5	1
Tetrahydrofuran	ND	ND	0.5	1	1,4-Dichlorobenzene	ND	ND	0.5	1
Propionitrile	ND	ND	1.0	1	n-Butylbenzene	ND	ND	0.5	1
Pentachloroethane	ND	ND	5.0	1	1,2-Dichlorobenzene	ND	ND	0.5	1
1,1-Dichloropropene	ND	ND	0.5	1	Hexachloroethane	ND	ND	0.5	1
Carbon Tetrachloride	ND	ND	0.5	1	1,2-Dibromo-3-Chloropropane	ND	ND	0.5	1
Benzene	ND	ND	0.5	1	Nitrobenzene	ND	ND	0.5	1
1,2-Dichloroethane	ND	ND	0.5	1	1,2,4-Trichlorobenzene	ND	ND	0.5	1
Trichloroethene	ND	14.5	0.5	1	Hexachloro-1,3-butadiene	ND	ND	0.5	1
1,2-Dichloropropane	ND	ND	0.5	1	Naphthalene	ND	ND	0.5	1
Dibromomethane	ND	ND	0.5	1	1,2,3-Trichlorobenzene	ND	ND	0.5	1
Bromodichloromethane	ND	ND	0.5	1	4-Methyl-2-Pentanone	ND	ND	0.5	1
2-Nitropropane	ND	ND	0.5	1	1,1-Dichloropropanone	ND	ND	0.5	1
c-1,3-Dichloropropene	ND	ND	0.5	1	t-1,4-Dichloro-2-Butene	ND	ND	0.5	1
					Acrylonitrile	ND	ND	2.0	1

Calscience Environmental Laboratories, Inc.

ACCREDITED

ANALYTICAL REPORT

Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92670-7125

Attn: Ed Leonhardt
RE: Burke St./1576

Date Sampled: 01/13/97
Date Received: 01/13/97
Date Extracted: P/T
Date Analyzed: 01/17/97
Work Order No.: 97-01-104
Method: EPA 524.2

Report for sample number MW-1. All concentrations are reported in µg/L (ppb). ND denotes not detected at indicated reportable limit. DF and RL denote dilution factor and reporting limit, respectively. Each sample was received in a chilled state, intact, and with chain-of-custody attached.

Analyte	Blank	Sample	RL	DF	Analyte	Blank	Sample	RL	DF
Dichlorodifluoromethane	ND	ND	0.5	1	2-Hexanone	ND	ND	0.5	1
Chloromethane	ND	ND	0.5	1	Toluene	ND	1.9	0.5	1
Vinyl Chloride	ND	ND	0.5	1	t-1,3-Dichloropropene	ND	ND	0.5	1
Bromomethane	ND	ND	0.5	1	1,1,2-Trichloroethane	ND	ND	0.5	1
Chloroethane	ND	ND	0.5	1	Tetrachloroethene	ND	93	8	8
Iodomethane	ND	ND	0.5	1	1,3-Dichloropropane	ND	ND	0.5	1
Trichlorofluoromethane	ND	ND	0.5	1	Dibromochloromethane	ND	ND	0.5	1
Acetone	ND	ND	2.0	1	1,2-Dibromoethane	ND	ND	0.5	1
1,1-Dichloroethene	ND	4.3	0.5	1	Chlorobenzene	ND	ND	0.5	1
Methylene Chloride	ND	ND	0.5	1	1,1,1,2-Tetrachloroethane	ND	ND	0.5	1
Methyl-t-Butyl Ether	ND	ND	0.5	1	Ethylbenzene	ND	ND	0.5	1
t-1,2 Dichloroethene	ND	ND	0.5	1	m/p-Xylene	ND	1.6	0.5	1
Carbon Disulfide	ND	ND	0.5	1	o-Xylene	ND	1.1	0.5	1
Diethyl Ether	ND	ND	0.5	1	Styrene	ND	ND	0.5	1
1,1-Dichloroethane	ND	ND	0.5	1	Bromoform	ND	ND	0.5	1
Methyl Acrylate	ND	ND	0.5	1	Isopropylbenzene	ND	ND	0.5	1
Chloroacetonitrile	ND	ND	0.5	1	Bromobenzene	ND	ND	0.5	1
2-Butanone	ND	ND	1.0	1	1,1,2,2-Tetrachloroethane	ND	ND	0.5	1
2,2-Dichloropropane	ND	ND	0.5	1	1,2,3-Trichloropropane	ND	ND	0.5	1
c-1,2-Dichloroethene	ND	ND	0.5	1	n-Propylbenzene	ND	ND	0.5	1
Bromochloromethane	ND	ND	0.5	1	2-Chlorotoluene	ND	ND	0.5	1
Chloroform	ND	4.5	0.5	1	4-Chlorotoluene	ND	ND	0.5	1
1,1,1-Trichloroethane	ND	1.3	0.5	1	1,3,5-Trimethylbenzene	ND	ND	0.5	1
1-Chlorobutane	ND	ND	0.5	1	t-Butylbenzene	ND	ND	0.5	1
Allyl Chloride	ND	ND	0.5	1	s-Butylbenzene	ND	ND	0.5	1
Methacrylonitrile	ND	ND	1.0	1	1,2,4-Trimethylbenzene	ND	ND	0.5	1
Methyl Methacrylate	ND	ND	0.5	1	4-Isopropyltoluene	ND	ND	0.5	1
Ethyl Methacrylate	ND	ND	0.5	1	1,3-Dichlorobenzene	ND	ND	0.5	1
Tetrahydrofuran	ND	ND	0.5	1	1,4-Dichlorobenzene	ND	ND	0.5	1
Propionitrile	ND	ND	1.0	1	n-Butylbenzene	ND	ND	0.5	1
Pentachloroethane	ND	ND	5.0	1	1,2-Dichlorobenzene	ND	ND	0.5	1
1,1-Dichloropropene	ND	ND	0.5	1	Hexachloroethane	ND	ND	0.5	1
Carbon Tetrachloride	ND	1.1	0.5	1	1,2-Dibromo-3-Chloropropane	ND	ND	0.5	1
Benzene	ND	ND	0.5	1	Nitrobenzene	ND	ND	0.5	1
1,2-Dichloroethane	ND	0.5	0.5	1	1,2,4-Trichlorobenzene	ND	ND	0.5	1
Trichloroethene	ND	11.4	0.5	1	Hexachloro-1,3-butadiene	ND	ND	0.5	1
1,2-Dichloropropane	ND	ND	0.5	1	Naphthalene	ND	ND	0.5	1
Dibromomethane	ND	ND	0.5	1	1,2,3-Trichlorobenzene	ND	ND	0.5	1
Bromodichloromethane	ND	ND	0.5	1	4-Methyl-2-Pentanone	ND	ND	0.5	1
2-Nitropropane	ND	ND	0.5	1	1,1-Dichloropropanone	ND	ND	0.5	1
c-1,3-Dichloropropene	ND	ND	0.5	1	t-1,4-Dichloro-2-Butene	ND	ND	0.5	1
					Acrylonitrile	ND	ND	2.0	1

Calscience Environmental Laboratories, Inc.

ACCREDITED

QUALITY ASSURANCE SUMMARY

ICP / GF Metals (Aqueous)

Environmental Audit, Inc. | Work Order No.: 97-01-104
Page 1 of 1 | Date Analyzed: 01/15-18/97

Matrix Spike

Sample Spiked: MW-2

Analyte	Method	Sample Conc.	Spike Added	MS Conc.	%REC	Control Limits
Antimony	EPA 200.7	ND	1.00	0.99	99	80 - 120
Arsenic	EPA 200.7	ND	1.00	1.09	109	80 - 120
Barium	EPA 200.7	0.44	1.00	1.45	101	80 - 120
Beryllium	EPA 200.7	ND	1.00	1.02	102	80 - 120
Cadmium	EPA 200.7	ND	1.00	0.99	99	80 - 120
Chromium	EPA 200.7	0.09	1.00	1.11	102	80 - 120
Cobalt	EPA 200.7	0.04	1.00	1.05	101	80 - 120
Copper	EPA 200.7	0.08	1.00	1.10	102	80 - 120
Lead	EPA 200.7	ND	1.00	1.01	101	80 - 120
Molybdenum	EPA 200.7	ND	1.00	0.99	99	80 - 120
Nickel	EPA 200.7	0.05	1.00	1.08	103	80 - 120
Selenium	EPA 200.7	ND	1.00	0.99	99	80 - 120
Silver	EPA 200.7	ND	0.50	0.20	40 Note 1	80 - 120
Thallium	EPA 200.7	ND	1.00	0.85	85	80 - 120
Vanadium	EPA 200.7	0.14	1.00	1.17	103	80 - 120
Zinc	EPA 200.7	0.19	1.00	1.20	101	80 - 120

Matrix Spike

Sample Spiked: MW-1

Analyte	Method	Sample Conc.	Spike Added	MS Conc.	%REC	Control Limits
Mercury	EPA 245.1	ND	0.0050	0.0049	98	50 - 130

1. The MS associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS was in control and, hence, the associated sample data was reported with no further corrective action required.

Calscience Environmental Laboratories, Inc.

ACCREDITED

QUALITY ASSURANCE SUMMARY

Method EPA 524.2

Environmental Audit, Inc. | Work Order No.: 97-01-104
Page 1 of 1 | Date Analyzed: 01/17/97

LCS/LCS Duplicate

Analyte	LCS%REC	LCSD%REC	Control Limits	%RPD	Control Limits
Vinyl Chloride	117	118	80 - 120	0	0 - 20
1,1-Dichloroethene	114	112	80 - 120	1	0 - 20
Chloroform	101	96	80 - 120	5	0 - 20
Carbon Tetrachloride	97	98	80 - 120	1	0 - 20
Trichloroethene	97	96	80 - 120	1	0 - 20
1,2-Dichloropropane	88	89	80 - 120	1	0 - 20
Chlorobenzene	94	93	80 - 120	1	0 - 20
1,4-Dichlorobenzene	98	99	80 - 120	1	0 - 20

Surrogate Recoveries (in %)

Sample Number	S1	S2
MW-2	92	108
MW-1	107	111
Method Blank	96	111

Surrogate Compound	%REC Acceptable Limits
S1 > 1,4-Bromofluorobenzene	70 - 120
S2 > 1,2-Dichlorobenzene-d_4	70 - 120

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

97-01-104

ENVIRONMENTAL AUDIT, INC.®

Planning, Environmental Analyses and Hazardous Substances Management and Remediation

1000 ORTEGA WAY, SUITE A
PLACENTIA, CA 92670-7125

☎ (714) 632 - 8521
FAX (714) 632 - 6754

Chain of Custody Record

SAMPLING REQUIREMENTS: RCRA ☐ NPDES ☐ SDWA ☐ _____ ☐

WRITTEN QC REPORT
ROUTINE QC ☒
RWQCB QC ☐

TURNAROUND TIME:
SAME DAY ☐ 24hr ☐ 48hr ☐ NORMAL ☑

PROJECT NO.: 1576

PROJECT NAME: 11630-11700 Burke St. Santa Fe Springs, CA

SAMPLER (Signature with Printed Name): Anand Hlhn Anand Helekar

PROJECT MANAGER: Ed Leonhardt

SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION	CONTR TYPE: GLASS	PLASTIC	BRASS/SS TUBE	ANALYSES REQUESTED: TPH-D 8015M	TPH-G 8015M	TRPH 418.1	BTEX 8020	VOC 8240	EOC 8270	OIL & GREASE	CAM METALS TOT WET	LEAD	HVOC 8010	524.2	Title 22 Metals (200.7)	Title 22 Metals (245.1)			NUMBER OF CONTAINERS	REMARKS
MW-2	1/13/97	12:20		/	Water	/	/												/	/	/			4	
MW-1	"	13:00		/	"	/	/												/	/	/			4	
TOTAL NUMBER OF CONTAINERS																								8	

RELINQUISHED BY: (Signature/Name)	DATE/TIME	RECEIVED BY: (Signature/Name)	RELINQUISHED BY: (Signature/Name)	DATE/TIME	RECEIVED BY: (Signature/Name)
Anand Hlhn Anand Helekar	1/13/97 14:00				
RELINQUISHED BY: (Signature/Name)	DATE/TIME	RECEIVED BY: (Signature/Name)	RELINQUISHED BY: (Signature/Name)	DATE/TIME	RECEIVED BY: (Signature/Name)

SAMPLES SHIPPED VIA:
FEDEX ☐ UPS ☐ AIRBORNE ☐
HAND ☐ AIRFREIGHT ☐ _____ ☐

SHIPPED BY: (Signature/Name)

AIRBILL #:

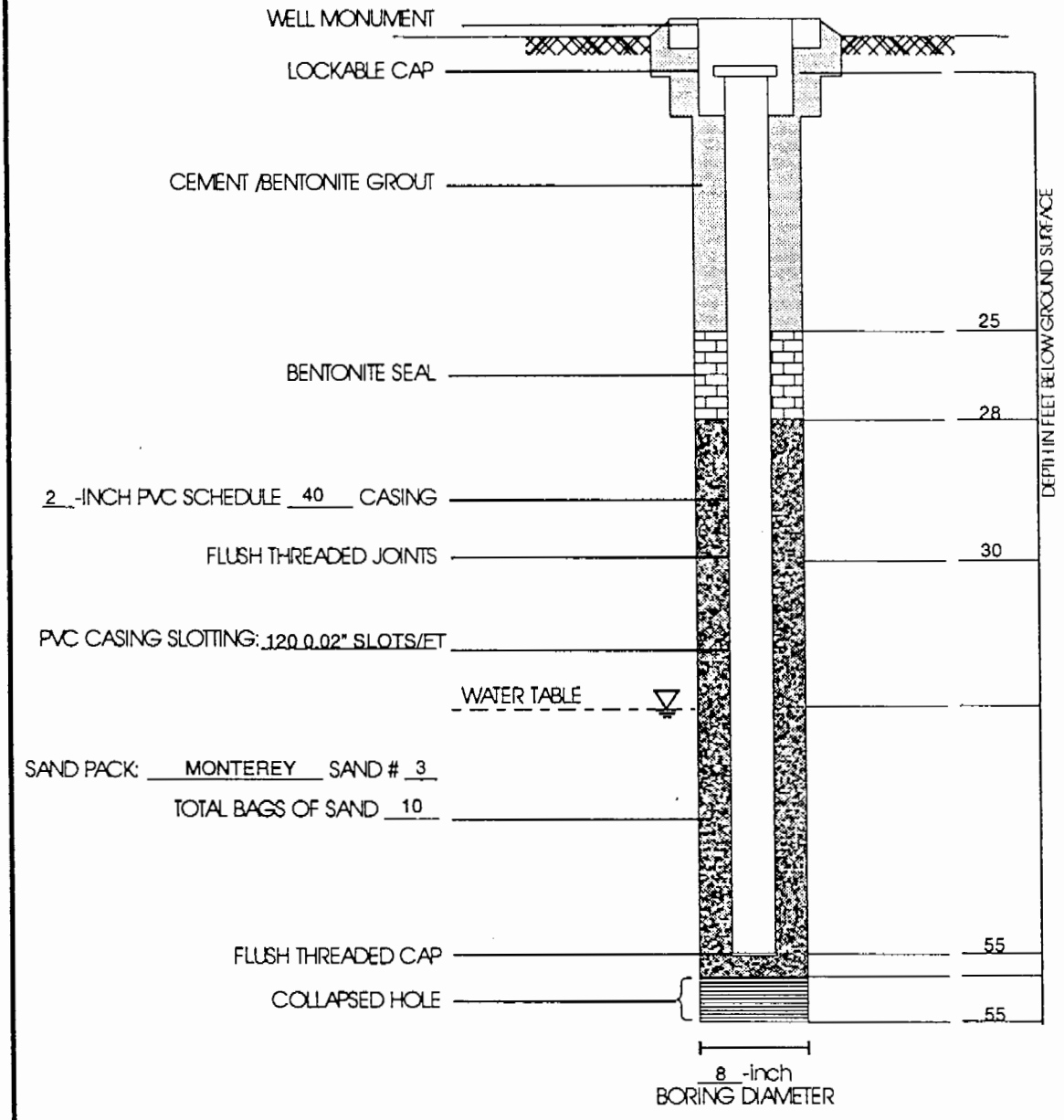
COURIER: (Signature/Name)

RECEIVED FOR BY: (Signature/Name)

LAB: CEL

DATE/TIME: 1/13/96 1400

APPENDIX E: MONITORING WELL CONSTRUCTION DETAILS



WELL NO. MW-2
Date Constructed 12 / 23 / 96
Date of Measurements ___/___/___

ENVIRONMENTAL AUDIT, INC.®

MONITORING WELL CONSTRUCTION DETAIL

11700 Burke Street
Santa Fe Spring, California 90670

Project No. 1576

K:/1576/1576MW2.CDR

APPENDIX F: GROUND WATER SAMPLING LOGS

GROUND WATER Sampling Log

Environmental Audit, Inc.®
Planning, Environmental Analyses and Hazardous Substances Management and Remediation
1000 ORTEGA WAY, SUITE A
PLACENTIA, CA 92670-7125
☎ (714) 632 - 8521
FAX (714) 632 - 6754

DATE:	1-13-97
PROJECT NO.:	1576
CLIENT:	BURKE ST.
WELL NO.:	MW-1
WELL DIAMETER (INCHES):	2"
SAMPLED BY:	A.H.

WELL PURGING INFORMATION

ONE CASING VOLUME OF WATER CALCULATED USING THE FOLLOWING:

TOTAL DEPTH OF WELL (ft.)		DEPTH TO WATER LEVEL (ft. bgs)		DEPTH TO FREE PRODUCT (ft. bgs)				
53	—	38.33		—	→	14.67	0.16	2.35
							X WELL VOLUME VOLUME FACTOR	= ONE CASING VOLUME OF WATER (GALLONS)

WELL VOLUME FACTORS

WELL CASING ID (inches)	VOLUME FACTOR
2.0	0.16
4.0	0.65
6.0	1.47

PURGE TIME (hrs.): START 12:40 STOP 12:50

METHOD: DOWN HOLE PUMP ☒ DEDICATED PUMP ☐ BAILER ☐ OTHER ☐

TYPE/MODEL: GRUNDFOS MP

GALLONS PURGED	TEMP (°F)	CONDUCTIVITY (Micro-ohms/cm) x 10^3	pH	TURBIDITY (NTU)	REMARKS
3	63.9	1.07×10^3	8.61	7200	PURGED 5 GALLONS

WELL SAMPLING INFORMATION

TIME SAMPLED (hrs.): 13:00

METHOD: DOWN HOLE PUMP ☐ DEDICATED PUMP ☐ BAILER ☒ OTHER ☐

TYPE/MODEL: VOSS TECHNOLOGIES

COMMENTS: _____

GROUND WATER Sampling Log

Environmental Audit, Inc.®
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1000 ORTEGA WAY, SUITE A
PLACENTIA, CA 92670-7125
☎ (714) 632 - 8521
FAX (714) 632 - 6754

DATE:	1-13-97
PROJECT NO.:	1576
CLIENT:	BURKE ST.
WELL NO.:	MW-2
WELL DIAMETER (INCHES):	2"
SAMPLED BY:	A.H.

WELL PURGING INFORMATION

ONE CASING VOLUME OF WATER CALCULATED USING THE FOLLOWING:

TOTAL DEPTH OF WELL (ft.)		DEPTH TO WATER LEVEL (ft. bgs)		DEPTH TO FREE PRODUCT (ft. bgs)				
55	—	32.14	=	—	22.86	X 0.16	=	3.66
						WELL VOLUME VOLUME FACTOR		ONE CASING VOLUME OF WATER (GALLONS)

WELL VOLUME FACTORS

WELL CASING ID (inches)	VOLUME FACTOR
2.0	0.16
4.0	0.65
6.0	1.47

PURGE TIME (hrs.): START 10:40 STOP 12:15

METHOD: DOWN HOLE PUMP ☒ DEDICATED PUMP ☐ BAILER ☐ OTHER ☐

TYPE/MODEL: GRUNDFOS MP

GALLONS PURGED	TEMP (°F)	CONDUCTIVITY (Micro-ohms/cm) x 10^3	pH	TURBIDITY (NTU)	REMARKS
15		DEVELOPED 15 GALLONS			200 Hz
15	68.6	1.60×10^3	8.12	>200	
18	66.7	1.58×10^3	7.65	>200	
21	67.6	1.53×10^3	7.49	>200	PURGED 25 GALLONS

WELL SAMPLING INFORMATION

TIME SAMPLED (hrs.): 12:20

METHOD: DOWN HOLE PUMP ☐ DEDICATED PUMP ☐ BAILER ☒ OTHER ☐

TYPE/MODEL: VOSS TECHNOLOGIES

COMMENTS: _____